

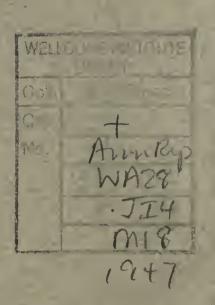
# ANNUAL



PRINTED AT

SOLAR WORKS

MADRAS:: 1948





### CORPORATION OF MADRAS

### HEATLH DEPARTMENT

### ANNUAL REPORT FOR 1947

### CONTENTS

INTRODUCTION			Pages i to vi
REPORT FOR 1947	• •		Pages 1 to 37
			Page
Vital Statistics			I
Vaccination			8
Medical Relief		••	9
Medical Inspection of Corporation Schools	• •		12
Sanitation			14
Conservancy			22
Mosquito Control Measures			25
Water Analysis			27
Food Analysis	• •		29
Working of the Port \\Health Dept. Madras	• •	• •	34
Child Welfare Scheme	• •	• •	35
APPENDIX OF STATEMENTS		• •	Pages 38 to 82 <sup>°</sup>
Vital Statistics		• •	38
Vaccination	• •		49
Medical Relief	• •	• •	51
Medical Inspection			54
Sanitation			56
Water Analysis	b	•,•	58
Food Analysis			69
Child Welfare			71



### INTRODUCTION

The year under report, I am glad to observe, has been satisfactory throughout with regard to the public health conditions which prevailed in the It is remarkable that the city maintained normal health in spite of the continued migration of people into the city rendering conditions of living in the metropolis more tense and difficult. The city had, no doubt, been extended for facilitating the movement of people from the more crowded parts of the city to the added areas. The number of houses that have newly sprung up, due to private as well as co-operative enterprises, has been too low to relieve eongestion in the city to any appreciable extent and the evils arising from over-crowding stalked the citizens all through the year. Moreover the supply of essential commodities was not at all adequate to meet the demand in the city and the citizens, in consequence, were subjected to privations which sapped their vitality to withstand diseases a good deal. Yet, despite these factors, there was no unusual mortality under any of the principal diseases, as the vital statistical figures in the report will indicate, and normal health conditions reigned in the city from the beginning to the end of the year.

A disquieting feature in the year was the failure of the monsoon rains, the effects of which came to be felt in the subsequent year. 34.79 inches of rainfall for the year is the lowest recorded since 1942.

The city recorded 40,753 births and 29,979 deaths. The rates of births and deaths for the year were 42.08 and 30.96 per mille of the estimated population. The excess of births over deaths resulted in a natural increase of 10,774 in the population of the city—a phenomenon indicative of the existence of favourable conditions for its occurrence. The infantile death-rate was 195.99 and the maternal mortality rate was 3.90 per 1,000 live-births in the year. The average rates for the quinquennium (1942–46) were 225.03 and 6.45 respectively for 1,000 live-births during the period.

After many years a single death from plague occurred in the city. There were 3 imported cases, two of which came from Vellore and the third case from a village in Chittoor District. All of them were isolated and treated in the Infectious Diseases Hospital. One of these proved fatal. The contacts were immediately inoculated and all effective preventive measures adopted.

There were 2 deaths from eholera and 20 deaths from small-pox. The mortality rates were 0.002 and 0.02 per mille respectively of the estimated population.

43,040 inoculations against eholera were performed. 37,468 primary vaccinations were done and 1,27,682 persons were revaccinated. The number of primary vaccinations done is the highest on record. A steady increase in the number of primary vaccinations done year after year has been possible on

account of the systematic house-to-house inspection done by the Vaccinators under the block-work system. The year 1946 has been a peak year for revaccination and due, presumably, to the immunity conferred on a large number of residents, the city remained practically free from small-pox during the year.

It may be mentioned here that the vital statistical rates mentioned in the report have been worked out on the basis of the estimated population of 9,83,087 for the mid-year. The actual population being approximately 13 lakhs, the disparity in the two figures is great and the statistical rates can hardly be expected to give a correct indication of the health of the city. Under the prevailing, rapidly changing conditions, the system of taking a decennial census has been unhelpful and the need for a quinquennial enumeration of the population appears imperative.

The next census enumeration will ordinarily be done only in 1951. Until then the department will have to deal with misleading statistical rates and will not be in a position to present a faithful picture of the state of health of the city. The taking of an interim census is certainly desirable but how far it will be feasible needs careful consideration.

29 general out-patient dispensaries and the special clinics for skin diseases and leprosy, venereal diseases and tuberculosis did good work. Nearly 20 lakhs of cases were attended to at the general dispensaries. 266 new cases of leprosy (167 infective and 199 non-infective) received suitable treatment. 61 cases of repeated abortion from Child Welfare Centres were investigated and treated. The Health Visitors attached to the Venereal and Tuberculosis Clinics did useful work by tracing the patients to their homes and persuading them to continue treatment until they were completely cured and prevailing upon contacts to get themselves examined and treated against possible infection.

The Public Health Laboratory opened in 1946 became popular. 1,575 specimens were examined during the year; 942 of these were received from private medical practitioners. Due to lack of adequate accommodation several more important diagnostic tests and investigations could not be undertaken by the Pathologist. It is, however, hoped that with the extension and further equipment of the laboratory covering the whole of the first floor of the present building, the usefulness of the laboratory will be very greatly extended.

The opening of the Sri Thiruwateeswarar Tuberculosis Hospital is an outstanding achievement in the field of public health. This hospital owes its existence to the generosity of Rao Sahib Sri T. P. Ramasamy Pillai and supplies a long felt need in the city. It is a step in the right direction in grappling with this fell disease. The Corporation is greatly indebted to the donor who, by his act of munificence, has rightly earned the gratitude of the citizens of Madras.

7 Medical Inspectors and 3 Medical Inspectresses attended to medical inspection work till the end of 1947. From the beginning of the current year the system of work was reorganised with a view to increase the efficiency of the inspection and the following-up and treatment of children requiring attention.

The Medical Officers in charge of Registration and Vaccination work were relieved of their routine duties and drafted for medical inspection work. They had to conduct medical examination of pupils in the zones allotted to them besides supervising registration and vaccination work in the divisions under their charge.

22,220 boys and 13,076 girls were examined and 8,944 boys and 4,704 girls were found defective. Most of the defective children sufferred from complaints resulting from malnutrition and vitamin deficiencies. Administration of shark liver oil, calcium lactate and milk to under-nourished children and yeast to children who had stomatitis of nutritional origin brought about a marked improvement in their condition. 1,577 children were sent to Government hospitals for special treatment as required. 11,143 children were treated by the Medical Inspection Staff and 1,121 children at the Corporation dispensaries with benefit. 591 children with signs and symptoms of leprosy had the benefit of receiving appropriate treatment.

5 Assistant Health Officers and a Sub-Assistant Health Officer assisted me in looking after the general sanitation and conservancy of the city. There were 54 Sanitary Inspectors and 54 Conservancy Inspectors working in the 50 divisions of the city.

The work of sewer laying in the city showed good progress in the year. The total length of sewers laid in the year was 55,474 feet of which 26,011 ft. were laid in Thyagarayanagar. Progress made in the provision of flush-out type of latrines was also appreciable. 2,554 flush-out latrines were installed in private buildings. 23,316 houses were inspected by the divisional staff, 6,605 houses were found defective and 4,204 houses were repaired and improved as a result of action taken against the owners.

The incinerators in the city having been out of function, the rubbish collected in various divisions was diverted to the reclamation of several low-lands and ponds. This measure served to relieve the strain on the bullock drawn carts as well as motor lorries which had otherwise to go long distances to the places of disposal. Such work was undertaken on payment of charges from private parties and was done free in the case of places belonging to charitable institutions, public bodies or Government. This was also a scheme of great public health importance, in as much as it facilitated reclamation of low-lands which were potential breeding places of mosquitoes. Considering the prohibitive cost of transport, non-availability and high cost of suitable material for filling these places, this scheme has worked very successfully and efficiently. Effective supervision was maintained at these places and every layer of rubbish was regularly and well covered over by a suitable layer of earth, and spraying with D.D.T. and other precautions effectively kept down fly breeding and smell.

The Buckingham Canal boat basin at the junction of Wall Tax Road and Anna Pillai Street was reclaimed. Particular mention may be made of the progress of the work of reclaiming the large pond "Arathakuttai" in Mylapore, which soon after completion will be converted into a park or play ground.

The Poor House, Special Home and Work House completed another year of useful existence. Care bestowed on the destitute in the city was further extended by the opening of an Orphanage attached to the Poor House. This home for destitute children was opened by the Hon'ble Sri O. P. Ramasawmy Reddiar on 9-7-1947.

This institution is intended at present for orphan boys of 5 to 12 years of age. Inmates are well cared for and given elementary education. It is my hope that this institution will serve more and more the needs of a large number of the uncared for children in the city and train them to become useful citizens in later life.

During the year, a Veterinary Clinical Laboratory was started to serve the needs of the Corporation Veterinary Department. It is hoped that it will be enlarged so as to become more useful to the city as a whole.

Public and private markets received constant attention. The owners of private markets were required to maintain their markets in good condition so that vendors could expose articles for sale under sanitary conditions. But the difficulties experienced in making the private markets conform to the required standard of cleanliness still confronted the department. The closure of private markets on sanitary grounds is more a hypothetical proposition than a practical measure. The attitude of the owners of private markets has been very unhelpful and often hostile and the earnest attempts made by the department have not met with much success. It is therefore necessary to evolve and put into operation a scheme for acquiring and municipalising the private markets or getting them under the effective control of the Corporation.

As many as 3,229 samples were analysed in the Public Analyst's laboratory of which 1,300 were found adulterated. Of the total number of samples, 1,840 were of milk and 1,186 or 64.5% of this number were adulterated. Milk vendors were thus found to have been unscrupulous and to have taken advantage of the great demand for milk in the city to gain illegal profits. The temptation on their part to resort to this malpractice appears to have become all the more irresistible on account of the high price at which milk has been selling. As has been pointed out by the Public Analyst in his report mere imposition of deterrent fines on offenders convicted under the Madras Prevention of Adulteration Act will not effectively check this evil tendency Ways and means will have to be devised to on the part of milk vendors. provide the citizens with plentiful supply of wholesome milk at reasonable rates. It is no doubt a great task to be undertaken by the Corporation or Government by themselves. I am inclined to the view that any comprehensive scheme will not be worth trying unless and until there is a change for

the better in the attitude of milk men who are utterly insensible to the odium attached to profiteering in trade. As a matter of policy, therefore, co-operative ventures, however small, should be encouraged and supported. So far as the Corporation is concerned, a moderate beginning should be made by starting a dairy farm of its own for the supply of its own requirements.

Another major problem confronting the Corporation is housing. A very good beginning has been made in this direction. The extension of sewerage to every nook and corner of the city is an urgent sanitary necessity. This problem has become a collosal one with the extension of the city limits. Closely allied with this is the need for the complete conversion of all dry latrines into flushout ones to do away with the insanitary practice of hand removal of filth.

The improvement of slums and cheries is a problem awaiting solution. By whatever names they may be called, they are synonymous with filth, squalor and disease. In their present state, many of them constitute a blot on civilization and civic administration. They can no longer be allowed to remain so. The resources of the Government and the Corporation should be effectively harnessed to solve this vital problem.

To conclude, I wish to record my great appreciation of the loyalty and co-operation of my Assistant Officers. The officials of the department, one and all of them, displayed a high sense of duty and rendered devoted service. The achievements of the year would not have been possible except for the above and my thanks are due to them. I must acknowledge my gratefulness to the Commissioner of the Corporation for his uniform courtesy and for the ungrudging assistance and encouragement he gave to the department.

P. SADASIVAN, L.M. & S., B.S.Sc.

24-8-1948

Health Officer

#### FORWARDED

The gratifying feature was that the city was practically free from epidemics during the year despite the enormous increase in population, acute shortage of houses and the consequent overcrowding, scarcity of essential articles of food and phenomenal rise in the price of other commodities and, last but not least, the failure of the monsoon, the rainfall during the year being the lowest recorded since 1942.

The number of primary vaccinations conducted during the year, viz., 37,468, was the highest on record. As many as 1,27,682 persons were revaccinated. The special clinics, viz., Tuberculosis, Venereal, Leprosy and Skin Clinics continued to be popular. 35,276 children in schools were medically examined and 11,143 children were given treatment with benefit. Shark liver oil, Calcium lactate, milk and yeast were administered to ill-nourished children with striking results. 591 Corporation school children had the benefit of receiving early treatment for leprosy.

Some of the poor and the destitute in the city found shelter in the homes provided by the Corporation like the Poor House, the Special Home

and the Work House. The homes for the homeless constructed by the Corporation in recent years were highly beneficial to a number of people who migrated into the city in search of employment. As these six homes could accommodate about 250 families only, there are still hundreds squatting on pavements and open spaces in the city much to the detriment of the health of the city. The Corporation could not provide more homes of this type this year for want of funds. The orphanage for vagrant children opened in the Poor House compound on 9–7–47 is very popular.

In respect of sanitation, the Health Department has done its best in the face of several factors contributing to insanitation in the city, such as overcrowding, bad housing conditions, existence of a number of slums, lack of drainage facilities in certain areas that have not yet developed and, above all, lack of civic conscience and apathy among the people towards the elementary principles of sanitation. I should assert here that much depends on the people themselves and the city would have been much more clean and sanitary than it is now had the people realised their responsibilities as citizens and evinced interest in matters relating to the general health of the city and co-operated with the Corporation in keeping the city clean. Here is a very useful line of work for Social Welfare Leagues, Civic Associations and the like who can, both by example and precept, instil civic sense into the people. During the year, sewer laying work was pushed through vigorously and as many as new 2,554 flushout latrines were installed in private houses with a view to avoid fly nuisance and improve sanitation. low-lying lands were reclaimed in order to avoid stagnation of water and the breeding of mosquitoes.

The Child Welfare Scheme continued to be popular. Three child welfare centres were opened, one at Tondiarpet, another in Kothwal Bazaar and the third at Adyar bringing the total number of such centres in the city to 24. A maternity home with 24 beds was also opened in Choolai, a labour area. With a view to give some relief to women workers in the city, a creche was opened in Bunder Rama Naidu Garden, Broadway. The remarkable feature was the fall in the maternal and infant mortality rates during the year in respect of cases that came under the care of the Child Welfare Scheme of the Corporation.

The opening of a health and recreation centre (Asok Vihar) at People's Park marks the beginning of a new policy in the health administration of the city. The Corporation seeks to provide a healthy social environment in which all the members of a family—men, women and children—can thrive.

The Health Officer and his staff deserve to be congratulated on the good work done during the year. I trust they will strive their utmost to present a better record during the current year.

C. NARASIMHAM

Commissioner

### **SUMMARY OF VITAL STATISTICS FOR 1947**

Area	• • •	31833.60 acres
Population (estimated for mid-year, 1947)	•••	9,68,373
Average density per acre	•••	<b>3</b> 0
Births excluding still-births		40,75 <b>3</b>
Birth-rate (per 1,000 estimated population)	• • •	42.08
Deaths excluding still-births	•••	29,979
Death-rate (per 1,000 estimated population)	• • •	30.96
Natural increase	• • •	10,774
Still-births	• • •	1,408
Infantile deaths	•••	7,987
Infantile death-rate per 1,000 live-births	•••	$195 \cdot 99$
Maternal deaths	• • •	159
Maternal death-rate per 1,000 live-births	• • •	<b>3.</b> 90

### DEATHS FROM PRINCIPAL CAUSES

Principal causes		$De oldsymbol{a} t oldsymbol{h} s$	Death-rate
Plague	•••	1	0.001
Cholera	• • •	2	0.002
Dysentery and diarrhoea	• • •	3,847	$3 \cdot 97$
Small-pox	• • •	20	0.05
Malaria	• • •	55	$0 \cdot 06$
Enteric fever	• • •	163	0.17
Tubercle including tubercle of lungs	• • •	502	0.52
Respiratory diseases	•••	6,803	$7 \cdot 03$

### VITAL STATISTICS

Meteorology:—Atmospheric conditions recorded during the year 1947 are furnished in Annual Form 'A' in the appendix.

Rainfall:—34.79 inches of rain fell during the year 1947 against 82.12 inches in the previous year. The average rain-fall for the previous five years was 64.41 inches.

The following statement furnishes the rainfall in the city during each quarter of the year and in the previous five years.

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
1942	0.05"	3 · 29"	9.00"	22.88,,	35 · 22"
1943	$2\cdot73$ "	16.90"	11.54,,	52.88"	84.05"
1944	12.84"	4.08"	15.83,	$45 \cdot 22,$	77.97"
1945	0.12,,	6.01,,	15.63,,	20.95"	42.71"
1946	1.51"	4.51"	15.18"	60.92,	82.12"
1947	5.46"	1.41"	12.99"	14.93"	34.79"

Area and population:—The area of the city including the added areas is 49.74 sq. miles or 31,833.60 acres.

According to the census of 1941 the population was 8,75,184. The estimated mid-year population for the year, as furnished by the Public Health Commissioner with the Government of India, was 9,68,373 for the year. The average density based on the estimated population worked out to 30.0 per acre.

It is on the basis of the estimated population that the important vital statistical rates embodied in this report have been worked out. But it may be mentioned that the actual population of the city was considerably greater than the estimated population and that the phenomenal increase in population may be attributed to the conditions created by the war and its after effects. The inflow of people from other parts of the Province which began in the war years did not cease. People continued, even during the years subsequent to the war, to come into the city where availability of food was not so difficult as in the mofussil areas and where there was greater scope for employment to those discharged from military and allied services and better facilities for higher and technical education.

The vital statistical data based on the estimated population which is much less than the actual population do not represent the exact state of public health. The disparity in the figures for the estimated and actual population emphasises the need for quinquennial enumeration of the population instead of decennial enumeration.

Births:—The number of babies born in the city during the year was 40,753 recording a birth-rate of 42.08 per mille of the estimated population against 41,874 births or 43.91 per mille in 1946. The quinquennial (1942-46) rate was 35.23.

Of the 40,753 births registered during the year, 20,642 were males and 20,111 were females. The number of male births to every 100 female births was 103 as compared with 106 in 1946.

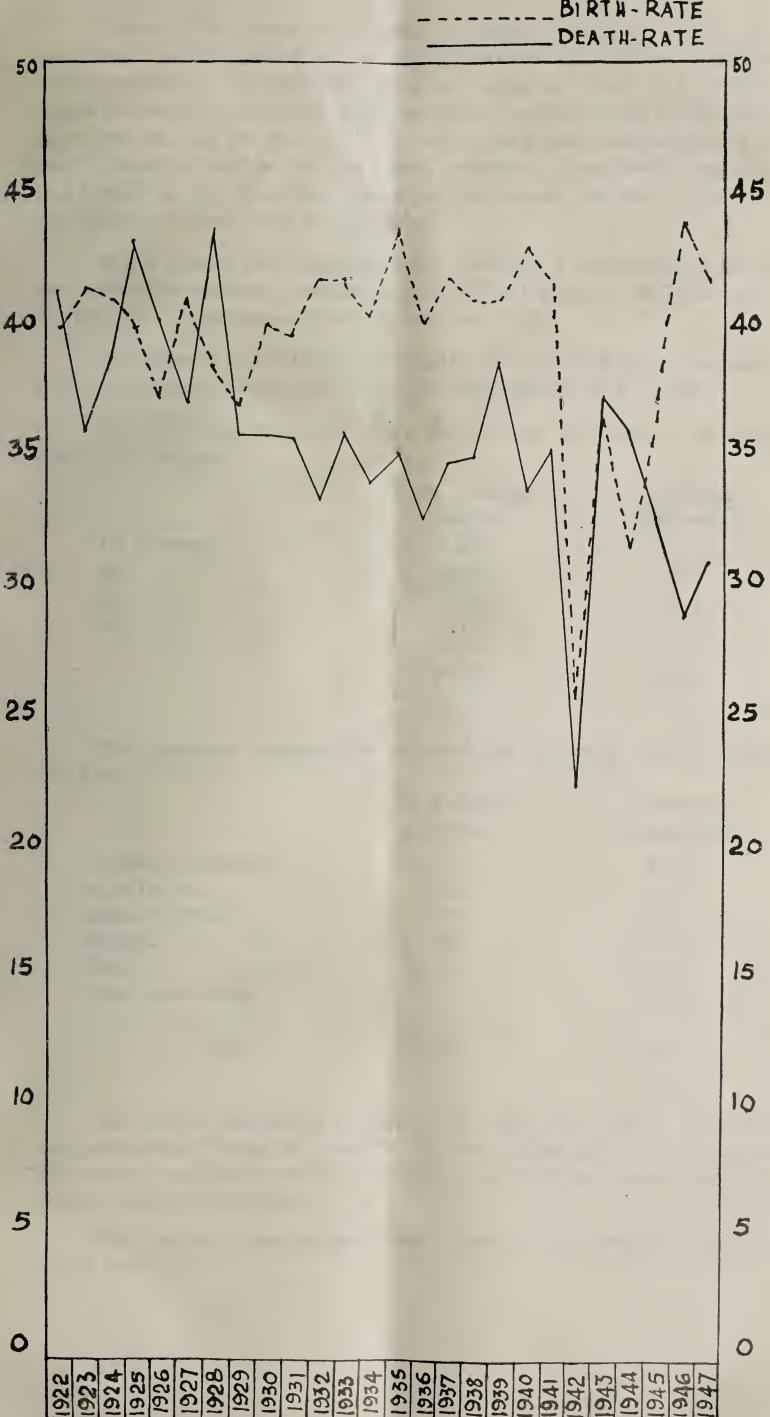
The following statement furnishes the number of births registered among the principal communities during the year.

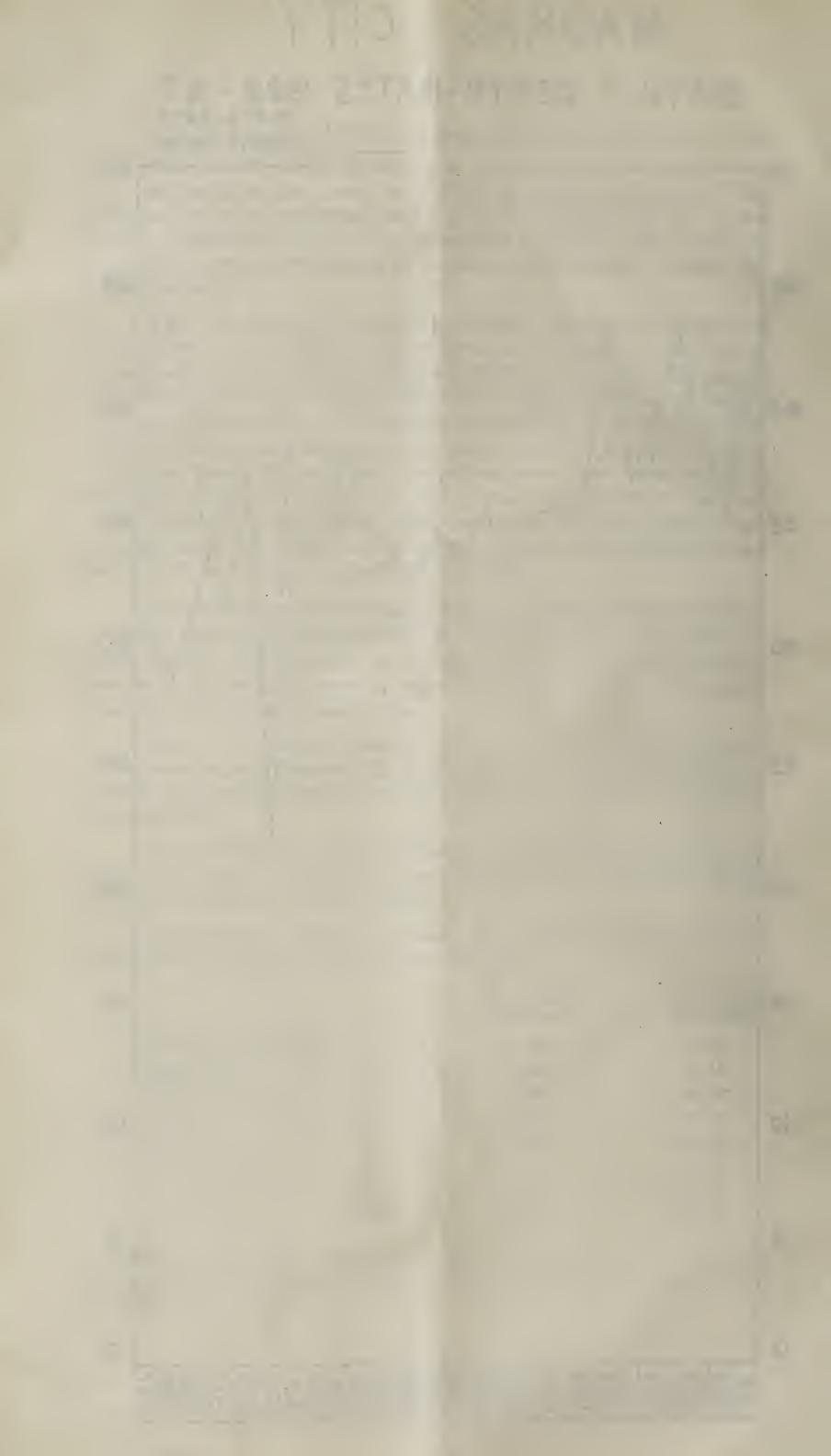
			No. of births registered	Percentage to total births
European community		• • •	42	0.10
Anglo-Indian ,,		• • •	462	1 · 13
Indian Christian,,			2,065	$5 \cdot 07$
Muslim .,			4,126	10.12
Hindu ,,			34,054	83.57
Other communities		• • •	4	0.01
	Total	•••	40,753	100.00

Still-births:—1,408 still-births were registered during the year representing a rate of 34.6 per 1,000 live-births against 35.9 in 1946.

# MADRAS CITY

BIRTH & DEATH-RATES 1922-47
BIRTH-RATE





Deaths:—The continued migration of people into the city not only contributed to the growth of the city population but also swelled the number of deaths. The presence of various hospitals, clinics and nursing homes continued to attract a larger number of patients from the mofussil parts into the city for treatment. Deaths among them were registered in the city and included in the city's vital statistics. These deaths ought to find a place in the statistical records of the various districts wherefrom the deceased persons came for treatment.

29,979 persons died during the year recording a death-rate of 30.96 per 1,000 of the estimated population against 27,381 deaths or 28.71 per mille in 1946. The quinquennial (1942-46) rate was 31.62.

An excess of 10,774 births over deaths was recorded during the year, the rate of natural increase being 11·1 per mille against 15·2 in 1946.

The following statement shows the number of deaths in the four quarters of the year.

		$egin{aligned} No. \ of \ deaths \ registered \end{aligned}$	$egin{aligned} Percentage \ to \ total \ deaths \end{aligned}$
1st Quarter	• • •	8,227	27 · 4
2nd ,,	•••	6,950	$23 \cdot 2$
3rd ,,	• • •	7,670	$25\cdot 6$
4th ,,	•••	7,132	$23 \cdot 8$
		29,979	100.0

The principal communities recorded the following deaths during the year.

		$No.\ of\ deaths$ $registered$	Percentage to total deaths
European community	• • •	15	0.05
Anglo-Indian ,,	• • •	220	0.74
Indian Christian ,,	• • •	1,397	4.66
Muslim ,,	•••	3,237	$10 \cdot 79$
Hindu ,,	• • •	25,107	$83 \cdot 75$
Other communities	•••	3	0.01
		101	T COMMISSION OF THE PARTY NAMED
Total	• • •	29,979	$100 \cdot 00$

Age and sex distribution of deaths:—Of the total number of 29,979 deaths registered during the year 15,700 were males and 14,279 females. The specific death-rates were 31.0 for males and 30.9 for females per 1,000 of the estimated population.

The number of deaths among males was 110 to every 100 deaths among females.

The statement put up below furnishes the number of deaths and the percentage of deaths to the total mortality under the various age-groups.

Age-g <b>ro</b> up		No. of deaths registered	Percentage to total deaths
Aye-group			to total teatins
Under one year	• • •	7,987	$26 \cdot 6$
1 to 5 years	• • •	<b>5,3</b> 39	17.8
5 to 10 ,,	• • •	1,182	$3 \cdot 9$
10 to 15 ,,	•••	499	1.7
15 to 20 ,,	• • •	796	$2 \cdot 7$
20 to 30 ,,		2,274	7.6
30 to 40 ,,	•••	2,299	$7 \cdot 7$
40 to 50 ,,	•••	2,274	$7 \cdot 6$
50 to 60 ,,	• • •	2,187	7:3
60 years & above	* * *	5,142	17.1
Total	• • •	29,979	100.0
			· · · · · · · · · · · · · · · · · · ·

Infantile mortality:—7,987 children under one year of age died during the year (4,224 boys and 3,763 girls) resulting in an infantile-mortality rate of 195.99 per 1,000 live-births against 7,663 deaths or 183.00 per mille in the previous year and the quinquennial rate of 225.03.

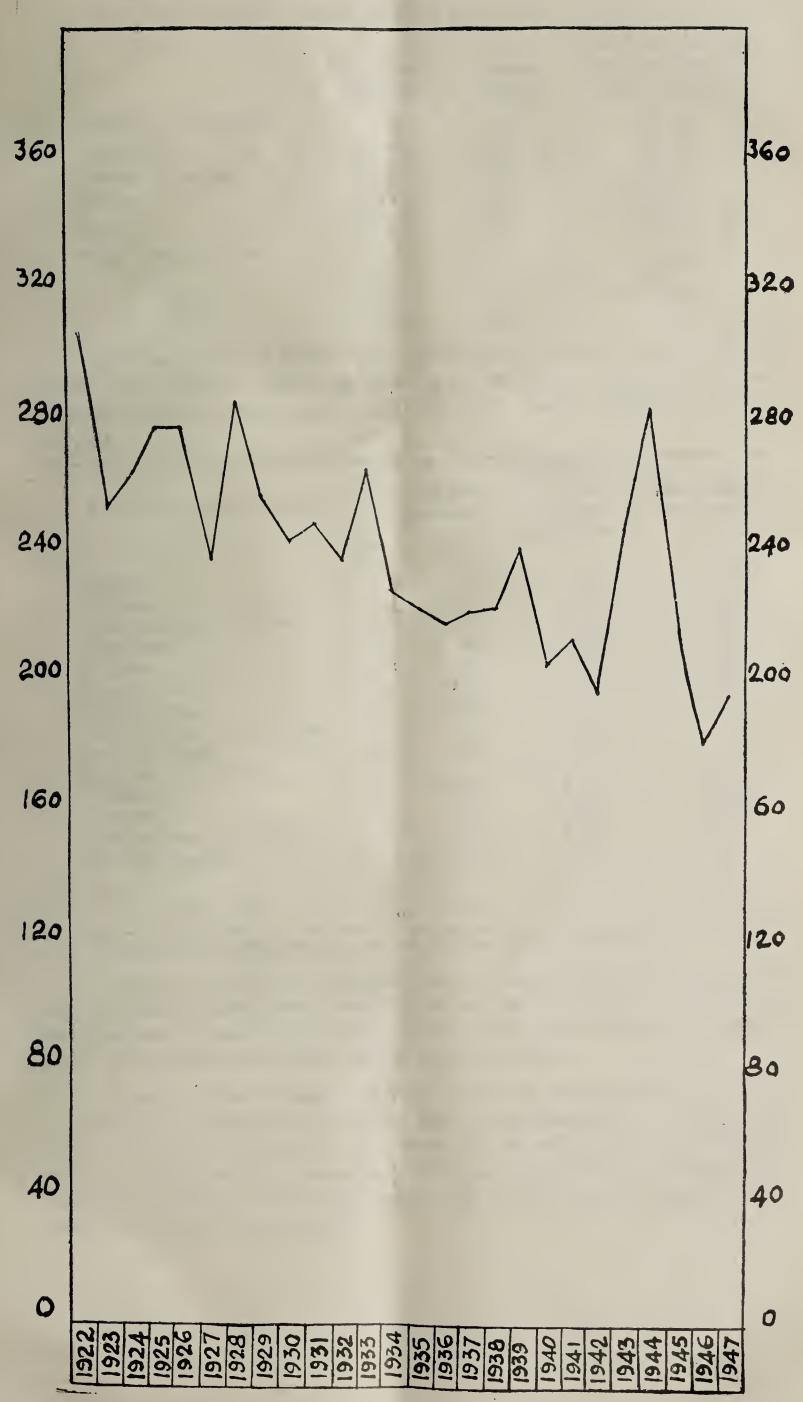
Age and causes of infantile deaths:—The statement furnished below gives the principal causes of infantile deaths under different age-groups.

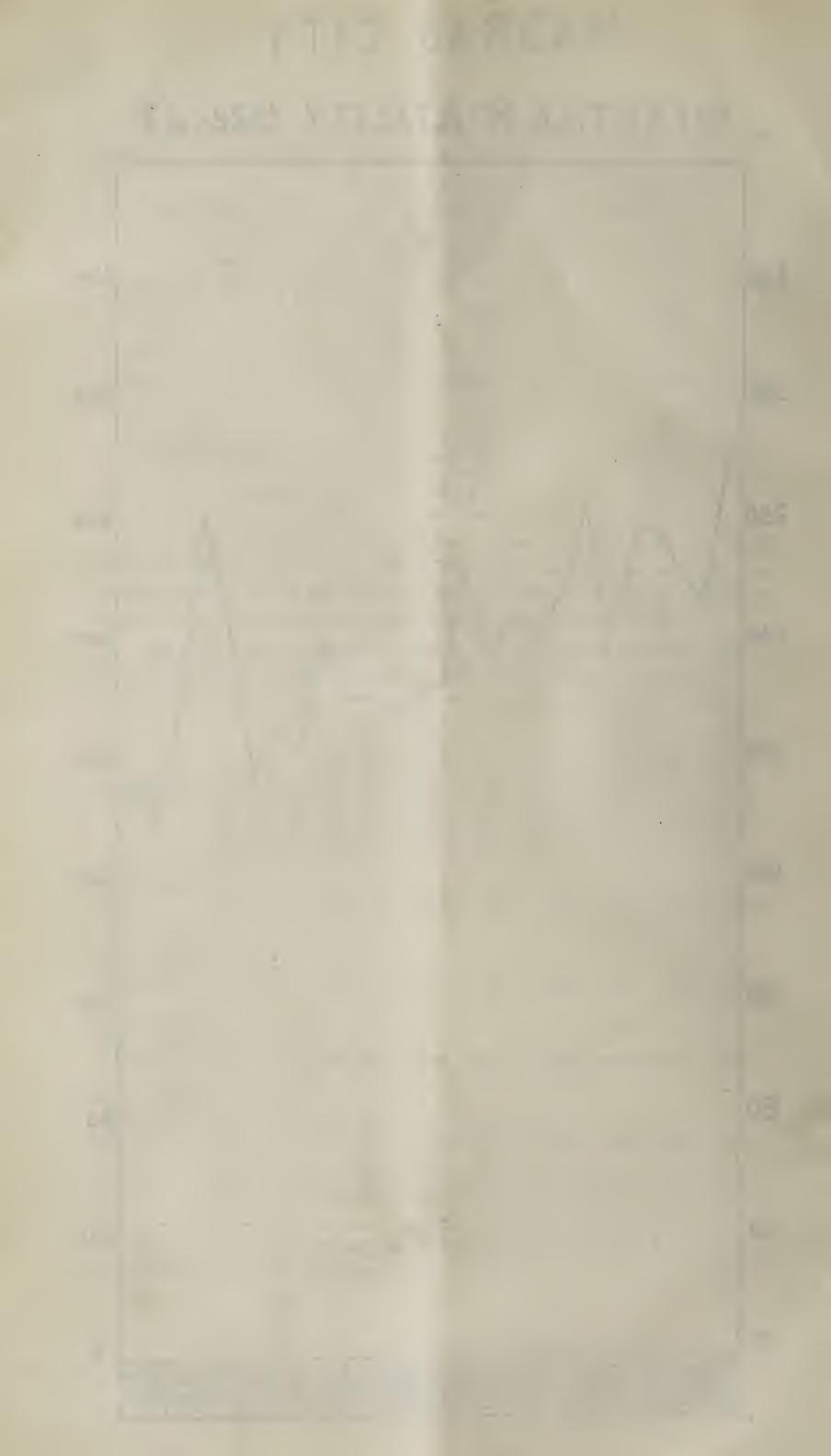
Age-groups	Small-pox	Measles	Malaria	Other fevers	Dysentery and diarrhoea	Premature birth, debility, etc.	Nervous system	Respiratory diseases	All other causes	Total deaths	Percentage to total deaths
Under seven days  Seven days			• • •	26	31	1,324	67	67	307	1,822	22.8
and under one month		•••	• • •	30	72	721	64	103	138	1,128	14.1
One month and under six months  Six months	2	• • •	• • •	124	352	319	212	932	831	2,772	$34\cdot 7^{-}$
and under one year	3		•••	132	472	55	121	999	483	2,265	28.4
Total	5		:	312	927	2,419	464	2,101	1,759	7,987	100.0

The percentage of infantile deaths to total deaths was 26.6 during the year against 27.9 in the previous year.

# MADRAS CITY

### INFANTILE MORTALITY 1922-47





Infantile mortality rates in principal communities:—Infantile deaths and rates among the principal communities are given below.

		No. of births registered	Infantile deaths	Rate ver 1,000 live- births registered in each community
European communit	y	42	1	$23 \cdot 81$
Anglo-Indian "	• • •	462	50	$108 \cdot 23$
Indian Christian "	•••	2,065	313	151.57
Muslim ,,	•••	4,126	902	$218 \cdot 61$
Hindu "	• • •	34,054	6,721	$197 \cdot 36$
Other communities	• • •	4	•••	•••
Wata l		40.779	7.007	107.00
$\operatorname{Total}$	• • •	40,753	7,987	195.99

Principal causes of deaths:—The table below furnishes the number of deaths from various causes together with death-rates for 1,000 of the estimated population and percentage to the total deaths registered during the year.

Principal causes of deaths	No. of deaths registered	Death-rate per 1,000 of estimated population	Percentage to total deaths
Plague	1	0.001	0.003
Cholera	<b>2</b>	$0.00^{5}$	0.007
Dysentery and diarrhoea	3,847	3.97	$12 \cdot 83$
Small-pox	20	0.02	0.07
Malaria	55	0.09	0.18
Enteric fever	163	0.17	0.54
Other fevers	2,862	2.96	$9\cdot 54$
Tubercle including tuber-	Í		,
cle of lungs	502	0.52	1.70
General respiratory			,
diseases	6,803	7.03	$22 \cdot 69$
Injuries	396	0.41	$1 \cdot 32$
Deaths from child-birth	159	3 ⋅ 90*	0.52
All other causes	15,169	15.67	50.60
All causes	29,979	30.96	100.00

<sup>\*</sup> Death-rate based on the number of live-births registered

Plague:—There were 3 imported cases of plague in the city during the year—2 cases in March came from Vellore and the other case in April came from Kalikeri village in Chittoor District. Of these 3 cases, one proved fatal. 32 inoculations against plague were performed.

Cholera:—The city was practically free from cholera during the year. 29 attacks and 2 deaths were recorded from the disease against 2 attacks and one death in the previous year. Of these 29 attacks reported during the year, 14 were imported. The annual death-rate was 0.002 per mille of the estimated population as compared with 0.001 in 1946 and the quinquennial (1942-46) rate of 0.14 per mille.

Preventive measures were adopted in the infected areas. 43,040 inoculations against cholera were performed in the city during the year.

One case of cholera was admitted into the Infectious Diseases Hospital, Tondiarpet, for treatment from the adjoining district of Chingleput. The patient was discharged after having been cured.

Diarrhoea and dysentery:—3,847 deaths were registered under these causes during the year with a death-rate of 3.97 per mille of the estimated population against 3,010 deaths with a death-rate of 3.16 per mille in the previous year and the quinquennial (1942-46) rate of 3.64 per mille.

Small-pox:—The city recorded fewer cases of small-pox during the year than in the previous year.

The following statement furnishes the number of attacks and deaths from small-pox in each quarter of the year.

				Attacks	Dea!hs
1st q	uarter			101	15
2nd	,,		• • •	1.8	4
3rd	,,		• • •	5	• • •
4th	,,		• • •	4	1
				<del>,</del>	
		Total		128	20

Of these 128 cases, 33 were imported and 10 were among the homeless and destitute in the city. All the cases were hospitalised except 3 which died before they could be detected and removed to the hospital. 5 cases were admitted into the Infectious Diseases Hospital, Tondiarpet, from the adjoining district of Chingleput during the year and all of them were discharged after recovery.

The annual death-rate from small-pox calculated on the estimated population was 0.02 per mille against 0.18 in 1946, the quinquennial (1942-46) rate being 0.12 per mille.

Malaria:—55 deaths from malaria were registered during the year against 45 deaths in 1946. The annual death-rate worked out to 0.06 per mille during the year against 0.05 in 1946 and 0.06 which is the quinquennial (1942-1946) rate.

Mosquito control measures carried out in the city during the year are given in a separate report.

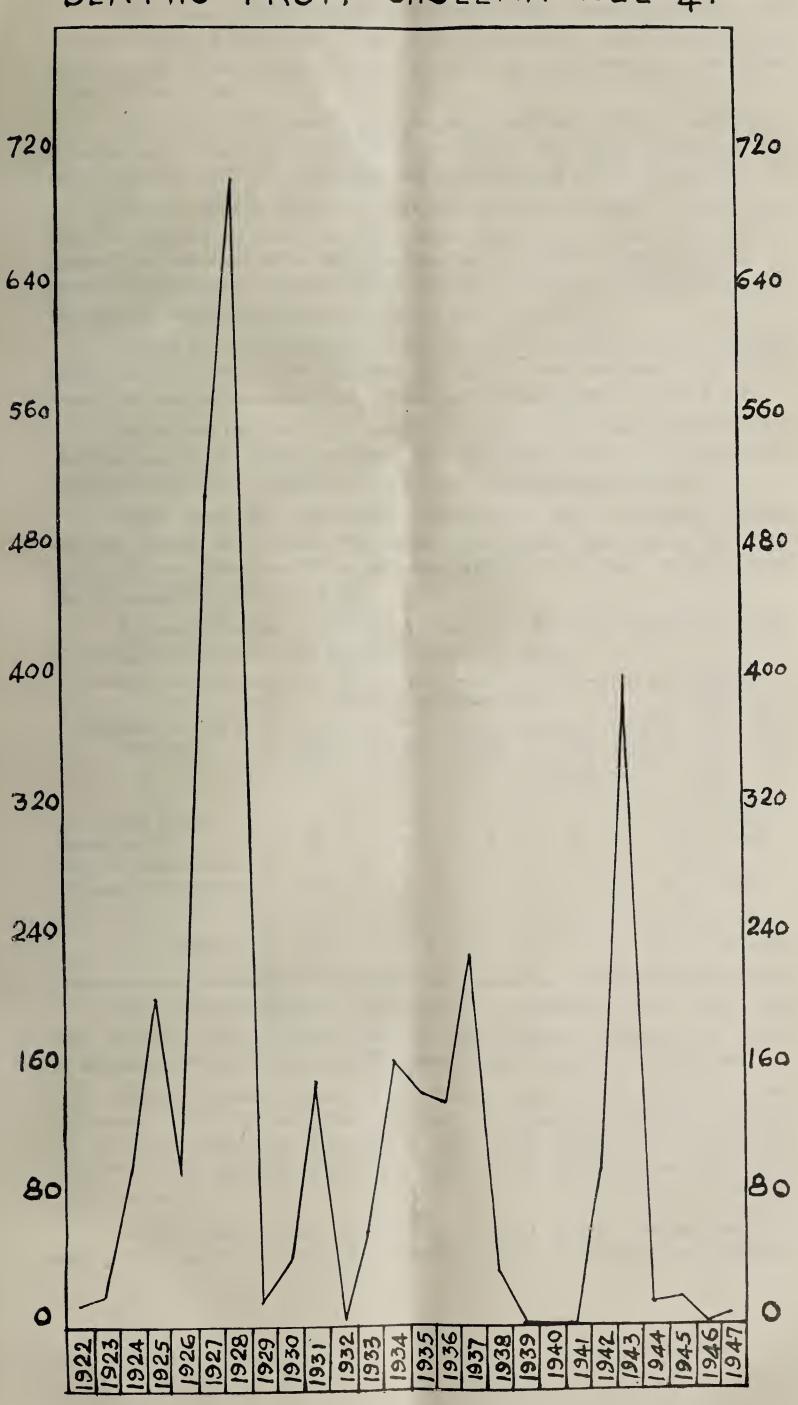
Enteric fever:—During the year there were 647 attacks with 140 deaths in the city against 523 attacks and 107 deaths in 1946. The death-rate was 0.15 per mille against 0.11 in 1946, the quinquennial (1942-1946) rate being 0.11.

Preventive measures were adopted in every case notified. 10,215 inoculations against typhoid were performed in the city during the year.

Besides these, 117 cases were admitted into the city hospitals, clinics, etc., from the adjoining districts for treatment during the year. Among these cases, 23 proved fatal.

### MADRAS CITY

### DEATHS FROM CHOLERA 1922-47





Other fevers:—2,862 deaths from "Other fevers" were registered during the year against 2,746 in 1946. The annual death-rate was 2.96 per mille against 2.88 in the previous year, the rate for the previous five years being 2.86 per mille.

Tuberculosis:—502 deaths with a death-rate of 0.52 per mille were recorded under this cause during the year against 405 deaths with a death-rate of 0.42 in 1946. The quinquennial (1942-46) rate was 0.43 per mille.

The Tuberculosis Clinic at Puliantope and the Government Tuberculosis Institute notified all cases that came under their care. These cases were immediately referred to the divisional sanitary staff for taking measures to prevent the spread of infection and to impress on the relatives of the patients the need to safeguard themselves against possible infection.

General respiratory diseases:—6,803 deaths with a death-rate of 7.03 per mille were registered under this cause during the year compared with 5,878 deaths with a death-rate of 6.16 in 1946 and the quinquennial rate of 7.40.

Deaths from injuries:—396 deaths were registered from injuries during the year against 291 in the previous year. The death-rate was 0.41 per mille compared with 0.31 in 1946 and 0.31 for the quinquennium (1942-46).

Deaths from child-birth:—159 mothers died after child-birth during the year against 149 in 1946. The maternal mortality rate during the year was 3.90 per 1000 live-births compared with 3.56 in 1946. The rate for the previous five years was 6.45.

Maternal deaths registered during the year are classified below according to age-groups and principal causes of death.

The state of the s	Ď	eaths in	13.	tage		
Principal causes of deaths	15-20 yrs.	20-30 yrs.	30-40 yrs.	40 yrs. and above	Total deaths	Percentage to total deaths
Puerperal sepsis Abortion Other accidents and	7 2	40	19 5	4	70 9	44.03 5.66
-diseases of pregnancy	15	39	26	• • •	80	50.31
Total	24	80	50	5	159	100.00

The statistics relating to the deaths of mothers who came under the care of the various clinics of the Child Welfare Scheme are given in a separate report by the Lady Superintendent, Child Welfare Scheme.

Deaths from other causes:—15,169 deaths from "Other causes" were registered in the city during the year with a death-rate of 15.67 per mille of the estimated population as compared with 14,565 deaths with a death-rate of 15.27 in the previous year. The rate for the previous five years was 16.26 per mille.

Certified deaths:—3,857 deaths were certified by the various hospitals and institutions in the city and 812 deaths by private medical practitioners

as to the causes of deaths. The certified deaths represented 16% of the total deaths registered during the year compared with 15% in 1946. Medical Officers in charge of registration of births and deaths verified the causes of other deaths.

#### **VACCINATION**

Vaccination:—1,65,150 vaccinations were performed in the city during the year. Of these, 37,468 were primary vaccinations and 1,27,682 were revaccinations.

Operations:—37,468 primary vaccinations were performed during the year against 33,517 in 1946. The quinquennial average was 27,941. 1,27,682 revaccinations were performed during the year against 2,95,226 in 1946. The statement put up below furnishes the number of primary vaccinations and revaccinations performed in the city during the past five years and in 1947.

Year		Primary vaccinations	Revaccinations	Total ·
1942		18,994	70,196°	89,190
1943		27,285	99,698	1,26,983
1944		29,732	2,93,673	3,23,405
1945		30,179	3,71,150	4,01,329
1946	•	33,517	2,95,226	3,28,743
1947		37,468	1,27,682	1,65,150

It will be seen from the above that there has been a steady increase in the number of primary vaccinations done year after year. This progress has been achieved by the regular house-to-house inspections done by the Vaccinators.

Number of successful vaccinations:—37,371 primary vaccinations and 4,981 revaccinations were successful during the year against 33,314 primary vaccinations and 8,239 revaccinations in 1946. The rate of success was 99.9 in primary vaccinations and 5.2 in revaccinations against 99.65 and 4.1 respectively during the year 1946.

Infantile vaccinations:—27,855 or 75% of the primary vaccinations in the year were of infants under one year of age.

Verification of births:—51,737 births (including out-births) were verified during the year for the purpose of vaccination as compared with 43,541 births in 1946. Of these, 5,672 infants died and 11,474 children left the city without being vaccinated. 27,812 children or 80% of the available children were successfully vaccinated during the year.

Inspection of vaccinated persons:—24,531 primary vaccinations and 31,456 revaccinations were verified by the inspecting officers during the year.

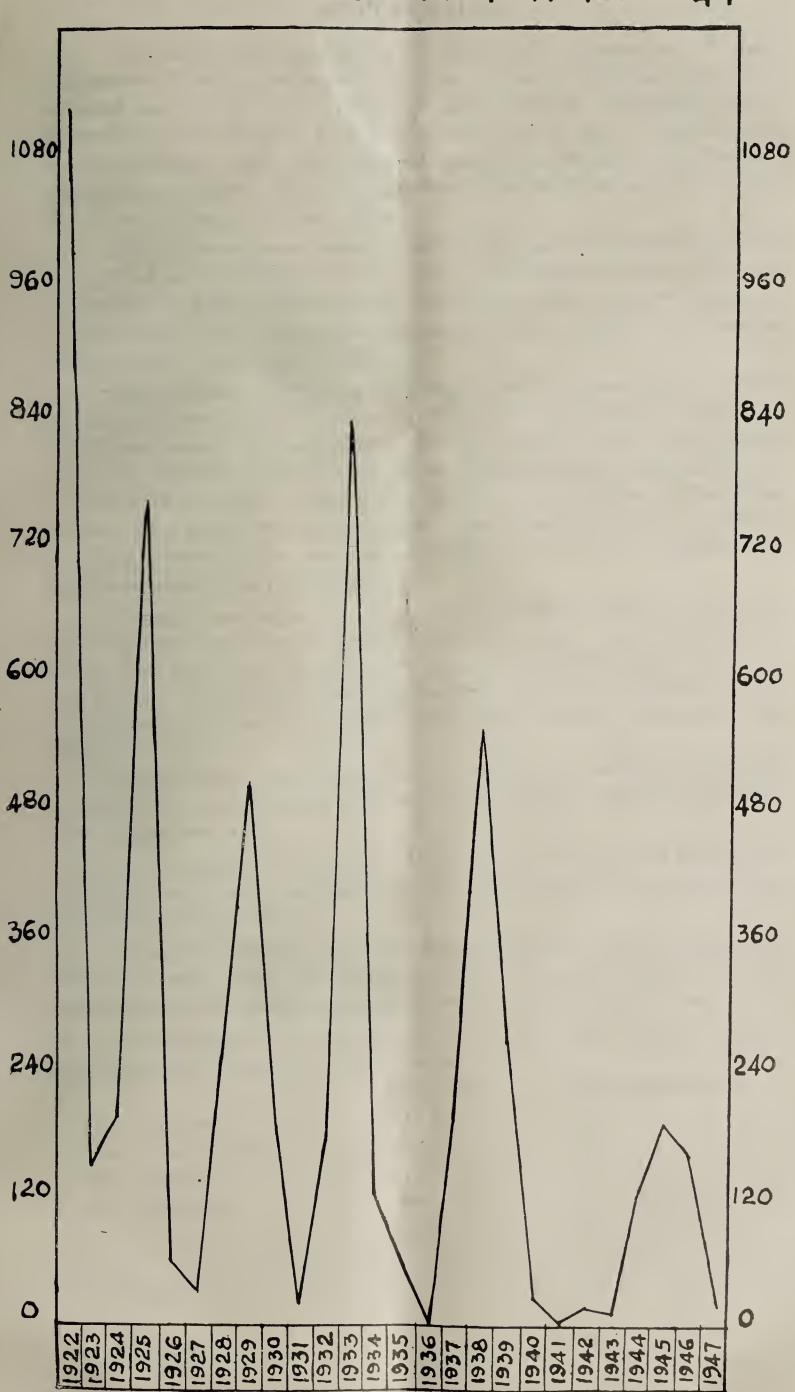
Postponement of vaccination:—The vaccination of 902 children was postponed on medical grounds at the end of the year.

Prosecutions:—84 parents were prosecuted for failure to vaccinate their children and 67 persons were prosecuted for failure to get themselves re-vaccinated in spite of repeated warnings.

Colfe Carre 131

## MADRAS CITY

DEATHS FROM SMALL-POX 1922-47





#### MEDICAL RELIEF

The Corporation maintained 21 allopathic dispensaries, 4 unanidispensaries, 3 siddha dispensaries and one ayurvedic dispensary located in different parts of the city to render free medical aid to the citizens. Each dispensary was in charge of a Medical Officer. In the case of 3 dispensaries separate sections, opened for women patients, were in charge of Lady Doctors. The ayurvedic dispensary continued to treat ailments of women and children and it was in charge of a Lady Doctor.

The number of cases treated in all the dispensaries during the year was 19,42,067 of which 9,40,320 were new cases. The number of minor operations performed was 9,026. Besides these dispensaries which treated ailments of general nature, the Corporation maintained 2 skin clinics, one venereal clinic and one tuberculosis clinic.

Skin Clinics:—The Skin and Leprosy Clinic, Ice House Road, recorded a total attendance of 43,157 cases which included 134 cases of leprosy and 13,973 new cases of skin and other diseases. There had been a slight reduction in the attendance of cases due to the gradual restriction imposed in the treatment of cases not suffering from skin diseases or leprosy. There were 937 new cases of scabies among the new cases treated in the clinic, recording a further decrease in the incidence of scabies in the city as compared with 1,525 new cases in the preceding year.

37 pupils reading in 29 Corporation elementary schools suspected of suffering from leprosy were directed to go to this clinic. On examination 23 among them were found to suffer from neural non-infective type of leprosy and 9 were doubtful cases requiring further observation. 5 pupils did not have leprosy. All the 23 pupils with neural type of leprosy were treated at the clinic.

The building in which the clinic is located was considerably improved and separate accommodation provided for the Medical Officer, dispensary, store, laboratory, etc.

At the skin and leprosy clinic attached to the Vyasarpadi Dispensary, 6,116 skin and leprosy cases were treated. 132 were new leprosy cases and 1,792 were new skin cases.

57 pupils reading in 16 Corporation elementary schools attended the clinic for examination and treatment. 35 of them had leprosy and the remaining 22 were doubtful cases which were kept under observation.

A statement of the results of the leprosy cases treated in the 2 Corporation skin clinics is furnished below:

	I	ce Hous <b>e</b> C	linic	Vyrsarpady Clinic
No. Improved		72		48
No. Symptom free	•••	10		. 2
No. Arrested		6		9
No. Otherwise		46		73
	•	134		132

Venereal Clinic:—The Venereal Clinic, Otteri, treated 19,545 cases during the year. Of these, 2,780 were new cases which included 1,809 men, 854 women and 117 children. The nature of cases treated at this clinic during the year was as follows:

,		Men	Women	Children	Total
Syphilis		431	333	74	838
Gonorrhoea		441	186	16	643
Chancroid		320	•••		320
Lympho Granuloma Venerium	• • •	57	6	• • •	63
Combination of one or more				1	
venereal diseases		35	46	• • •	81
Genital lesions of non-venereal	1			1	
origin	• • •	525	283	27	835
Total	1	1,809	854	117	2,780

The Health Visitor attached to the clinic paid 351 visits and 495 re-visits to the homes of the patients during the year. 423 patients who discontinued the treatment at the clinic were persuaded to resume the treatment. 71 cases of repeated abortions were referred by the Corporation Child Welfare Centres to this clinic for investigation and treatment.

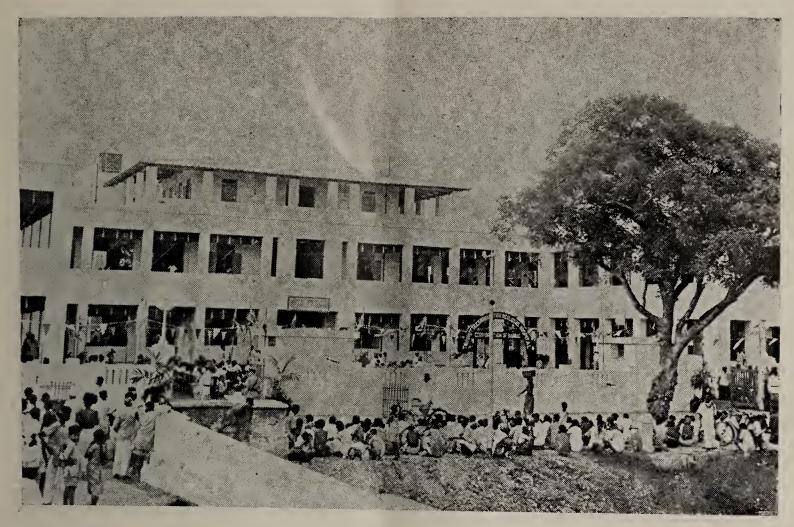
Sulphathiazol was the chief drug used in the treatment of gonorrhoea, chancroid and lympho granuloma venerium. It yielded successful results. In Sulphonomide resistant cases penicillin was tried with successful results.

Tuberculosis Clinic:—This clinic is located in Pulianthope. The total attendance at this clinic during the year was 29,341 cases of which 5,900 were new cases. Among the new cases, 601 had pulmonary tuberculosis including pleurisy with effusion and 68 had non-pulmonary affections relating to glands, bones and joints.

Among the 601 cases diagnosed as having pulmonary tuberculosis, 416 were males and 185 females. Classified according to age-groups 20 cases occurred among children under the age of 15, 400 cases were between 15 and 35 years of age and 181 cases were above 35 years of age. Classified according to communities 490 Hindus, 92 Muslims and 19 Christians suffered from pulmonary tuberculosis.

Patients came for treatment from different parts of the city and also from the neighbouring villages. 114 cases of pulmonary tuberculosis came from the Pulianthope area, 15 from Vyasarpadi, 90 from Choolai, 69 from Purasawalkam, 53 from Perambur, 77 from George Town and Park Town, 43 from Washermanpet and Royapuram, 16 from Royapettah and Triplicane and the rest from Egmore, Otteri, Chetpet, Chintadripet, Mambalam, Kodambakkam, Red Hills, Villivakkam and other surrounding villages. About 553 mill workers came for examination, advice and treatment and 85 among them suffered from pulmonary tuberculosis and were treated at the clinic.

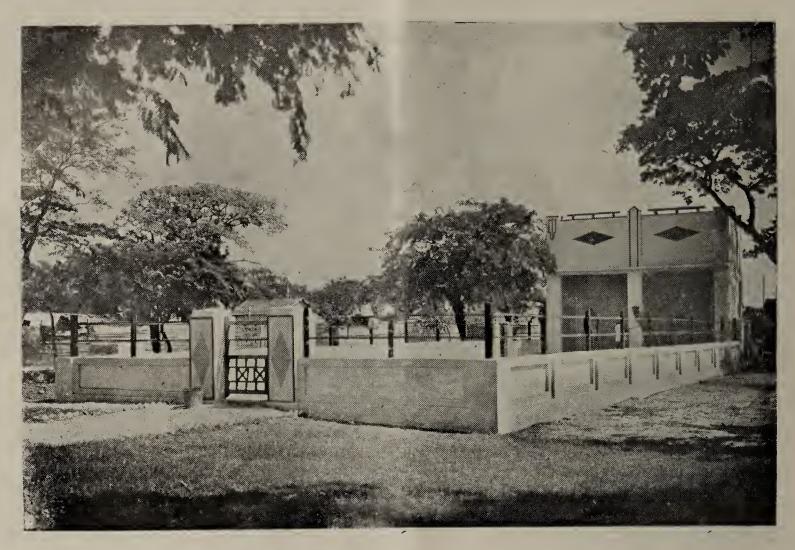
Most of the cases had bilateral affection with cavities and required isolation and symptomatic treatment. Due to poor economic conditions, the



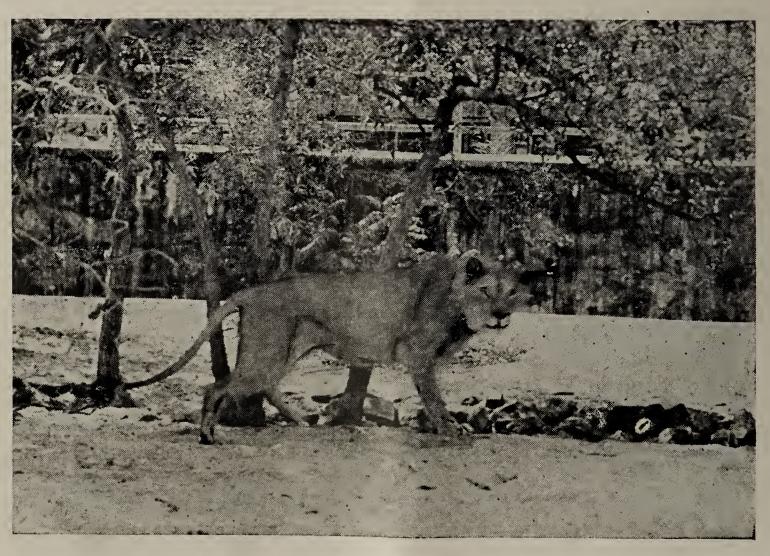
Sri Thiruvateeswarar Tuberculosis Hospital Konnur High Road



Opening of the Orphanage and School for vagrant children by the Hon'ble the Premier



A view of the newly constructed sheds in the Camel enclosure Zoological Garden



Lioness prowling in the open yard of the cage Zoological Garden

living conditions of the patients were such that isolation was not possible in their own homes; nor were they in a fit state of health to get special treatment like artificial pneumothorax as out-patients. A few cases were sent to the Union Mission Tuberculosis Sanatorium at Madanapalli for operative treatment like thorascoscopy and thoracoplasty.

The clinic had the facility of an 'X' ray apparatus for diagnosis. 4,272 fluoroscopic examinations and 412 radiographic examinations were done during the year. Fluoroscopy was done as a routine measure in all cases with history of cough, fever and loss of weight. The clinic had the benefit of the laboratory attached to it where specimens of sputum, blood smears, urine, etc., were examined.

17 cases received artificial pneumothorax treatment regularly and a total of 310 refills were given (initial and refills). Aspiration of thuid and of air was done 25 times in 4 cases.

The Health Visitor of the clinic paid 412 visits and 1,142 re-visits to the homes of the patients during the year. 945 contacts were examined of whom 69 were in the first stage of the disease, 2 were in the second stage and 12 were open cases in the third stage requiring immediate treatment. These cases attended the clinic for treatment and showed satisfactory progress.

Cases of pulmonary tuberculosis were notified to the divisional Sanitary Inspectors who visited the homes of the patients for taking preventive measures. They educated the patients and their families about the cause and spread of the infection.

Private medical practitioners and others in the city sought the advice of the clinic in the matter of diagnosis and treatment of persons who had cough and fever.

The incidence of tuberculosis is common among the poor labouring class of people. The clinic advised isolation and improvement of diet in every case, but poverty and bad housing conditions stood in the way. Rest in bed, good diet and special forms of treatment are essential for tuberculosis patients. It is only in a hospital such facilities could be given.

Rao Sahib Sri T. P. Ramasawmy Pillai donated funds for the construction of a hospital in Konnur High Road. The tuberculosis hospital constructed out of his donation was formally opened by H. E. Lady Nyeon 11-2-1947. This hospital will certainly be a boon to tuberculosis patients in need of institutional treatment.

Public Health Laboratory:—During the year, 1,575 specimens were received and examined at the laboratory. 942 specimens were from private medical practitioners, 507 specimens from the Corporation dispensaries, child welfare centres and clinics and 126 specimens from others. 1,316 specimens were examined free of charges as these related to persons whose income was less than Rs. 100/- per mensem. 259 specimens were examined and charged, realising a sum of Rs. 647-8-0 to the Corporation funds.

A statement of the various specimens examined at the laboratory during the year is furnished below:—

Blood (for gel, chopra, kahn tests, haemoglobin,	etc.)		340
Blood smears		• • •	598
Sputum	• • •	• • •	195
Urine	•••	• • •	198
Faeces	•••	• • •	79
Other smears (for gonococci and lepra bacilli)	• • •	• • •	165
	Total	4 • •	1,575

Extension to the laboratory building was under construction. When it is completed and more accommodation is made available, the field of work at the laboratory will be increased.

Infectious Diseases Hospital:—A total number of 1,523 cases were treated at the Infectious Diseases Hospital, Tondiarpet. The number of new cases was 1,484 of which 1,406 cases came from the city and 78 cases from the mofussil. There were 30 cases of cholera, 130 cases of small-pox, 382 cases of chicken-pox, 103 cases of measles, 28 cases of meningitis, 17 cases of diphtheria and 3 cases of plague. The 3 cases admitted for plague came from the mofussil. The number of contacts admitted was 243.

1,385 cases were cured and discharged before the year ended. The number of deaths was 96. The percentage of deaths for all causes was 6.1.

### MEDICAL INSPECTION OF CORPORATION SCHOOLS, 1947-48

There were seven Medical Inspectors and three Medical Inspectresses who did medical inspection work till 1-1-1948. From the 2nd of January, 1948 the work of medical inspection was reorganised. The Medical Officers in charge of Registration and Vaccination were relieved of their routine duties and ordered to do medical inspection work. The city was divided into twenty zones and the medical care of the school children besides registration and preventive work in each zone was assigned to a Medical Officer. The senior most Medical Inspector was, in addition to his routine work, placed in charge of the Central School Medical Stores and supply of drugs to the schools for the treatment of defectives. The treatment of children suffering from Hansen's disease was also supervised by him. There was no change in the medical inspection of girls.

Routine of work:—The staff examined as many children as possible before the schools closed for the summer and the defectives were treated with the assistance of the school staff. Shark liver oil, calcium lactate, yeast and other drugs were supplied to the schools from the Central School Medical Stores.

Out of 173 schools, the Medical Inspection Staff examined 159 schools. The total number on rolls in the schools inspected was 25,357 boys and 16,372 girls. The average daily attendance in them was 21,665 boys and 12,576 girls. 22,200 boys and 13,076 girls have been medically examined at these inspections. 8,944 boys (40.29%) and 4,704 girls (35.97%) were defective and required treatment. They were treated by the Medical Inspectors.

Personal hygiene:—1,359 boys (6·12%) and 151 girls (1·15%) were dirty in their person and clothing and were made to bathe in the schools. Some of them having scabies were treated after the baths.

Malnutrition and catarrhal conditions:—3,822 boys (17·22%) and 1,550 girls (11·85%) were undernourished as against 19·93% and 11·63% respectively in the previous year. They were given shark liver oil, calcium lactate and milk for improving their condition and beneficial effects were noticed. 2,646 boys (11·92%), and 820 girls (6·27%) had dental and oral complaints. 2,154 children had stomatitis and were treated at the schools with benefit. 101 children had their carious teeth extracted. 1,707 children had enlarged tonsils and received appropriate treatment. 63 among them had their offending tonsils removed by operation at the Government hospitals. 17 children had their defective vision either corrected by wearing glasses or improved by a course of vitamin oil. 258 children received treatment for discharge from the ear. 18 were defective in hearing and were provided seats close to teachers. 16 children were having defects of speech.

Shark liver oil and calcium lactate were administered to 5,845 children. 1,951 having stomatitis of nutritional origin were given yeast powder with benefit.

Circulatory and respiratory diseases:—149 boys (0.67%) and 103 girls (0.79%) had defects relating to heart and blood. 127 anaemic children improved by treatment. 9 children had enlarged spleen due to malaria and were suitably treated.

Diseases of bones and joints and nervous systems:—978 children had deformities of chest due to rickets in their childhood. 28 children had infantile palsies and functional disorders of nerves. All of them were suitably treated.

Infectious and contagious diseases:—1,599 boys (7·20%) and 1,062 girls (8·12%) had infectious diseases, the corresponding percentages for the previous year being 9·45 and 9·74 respectively. There was slight reduction in the incidence of scabies. 1,588 children were having scabies as against 1,800 in the previous year. Most of them were cured after treatment. 591 children had signs and symptoms of leprosy. They received appropriate treatment at the various skin clinics in the city. In most of them there was good improvement.

General preventive work:—12,640 children were protected against small-pox by revaccination. 9131 children were inoculated against cholera and 2,437 against typhoid.

Other diseases:—33 children under-went circumcision operation for phimosis on medical advice.

Medical treatment:—As had been explained in previous years most of the defects in the children were related to malnutrition and vitamin deficiencies and they were treated at the schools with the co-operation of the school staff. 11,143 children received treatment at the school with benefit. 1,121 children had to be sent to Corporation dispensaries for treatment of certain ailments that could not be attended to at the schools. 1,577 children were sent to Government hospitals for treatment of more serious ailments.

Reinspections:—525 re-visits to schools were paid after routine inspection for the treatment and re-examination of defectives. 12,800 re-examinations of children were conducted during these re-visits.

Co-operation of parents and teachers:—3,392 parents of defective children were present at the schools during the inspection and treatment of their children. The details of medical attention bestowed on their children were explained to them and their co-operation sought. The school staff made effective arrangements for the treatment of the ailing children and the good results obtained were mostly due to their interest in the work. Special attention was bestowed on the treatment of leper children.

School sanitation:—14 school buildings were found unsuitable for school purposes. In 43 schools improvements were suggested to the existing buildings. 119 schools had flushout latrines. 55 schools required playground accommodation. Proper water supply has been provided for the schools. Sanitary condition of the schools in the added areas needed improvement.

Midday meals:—7,928 children in 136 schools situated in poorer localities were provided with midday meals on school working days. The Medical Inspectors supervised the arrangements and distribution of the meals.

Propaganda:—153 lectures and 174 talks on health subjects were arranged in the schools. The total attendance at these lectures was about 1,89,619.

Milk supply:—In G. O. No. 817 (Food) dated 15-7-1947 Government sanctioned free supply of reconstituted milk to school children studying in Corporation elementary schools and allotted 45 tons for the purpose besides another 10 tons for distribution to expectant and nursing mothers attending child welfare centres. The scheme was inaugurated on 1-9-1947 and about 27,800 children who did not get midday meals had the benefit of the free supply.

#### SANITATION

Dr. P. Sadasivan, the permanent Health Officer, went on leave for 4 months from 2-6-1947 to 1-10-1947 and Dr. S. E. D. Masilamani acted as the Health Officer during this period.

The sanitary administration of the city with the extended areas remained under the control of 5 Assistant Health Officers and a Sub-Assistant Health Officer who was in charge of the Saidapet area. Consequent on the distribution of the city into 50 divisions according to the Madras City Municipal Act as amended in 1947 the following arrangements were made with effect from 11–11–1947.

1st	Range cor	nsisted of	Divisions	-1	to	10				
2nd	do	do	do	11	to	20				
3rd	do	do	do	21	to	30				
4th	do	$d\mathbf{o}$	do	31	ct	34	&	36	to	40
5th	do	do	do	41	to	46	&	<b>5</b> 0		

Each range was under the charge of an Assistant Health Officer and Divisions 35, 47, 48 and 49 were under the charge of the Sub-Assistant

Health Officer. Divisions 17, 22, 35 and 48 were further sub-divided for administrative purposes and a Sanitary Inspector was posted to work in each of the bifurcated parts of these divisions. There were therefore 54 divisional Sanitary Inspectors to look after the maintenance of sanitation in the 50 divisions of the city.

Sewers and flushout latrines:—Laying of sewers in different parts of the city continued unabated. 4,346 feet of sewers in Tondiarpet, 3,060 feet in Perambur, 2,063 feet in Vyasarpady, 6,493 feet in Purasawalkam, 5,090 feet in North Mylapore, 2,195 ft. in South Mylapore and 26,011 ft. in Thyagaraya nagar areas were laid. 6,216 ft. of sewers were laid in Royapuram, Kilpauk, Chetpet, Aminjikarai, Greams Road, Napier park and Ice House Road areas. The total length of sewers laid in the year was 55,474 ft.

798 flushout latrines were constructed by private plumbers in private buildings. 222 of these flushout latrines were installed in Thyagarayanagar. 1,756 flushout latrines were constructed by the Special Works Department in private houses.

Housing:—397 building applications were received for scrutiny with regard to ventilation, light, etc. 119 of these applications were refused for sanitary reasons. In the case of 312 applications to construct or reconstruct houses in sewered areas, the provision of flushout latrines was insisted upon.

The number of newly constructed houses was 438. In 316 of these houses flushout latrines were provided. The other houses were in unsewered areas and had masonry latrines only.

22,185 houses were inspected by the divisional Sanitary Inspectors to detect and rectify sanitary defects and 1,546 houses were inspected by them to investigate and remedy complaints received.

The number of houses wherein defects were noticed is given below:

No. of houses without proper drainage	• • •	1,131
No. of houses without adequate latrine accommodation	• • •	790
No. of houses without adequate water-supply		628
No. of houses without proper ventilation	• • •	997
No. of houses otherwise defective		3,059

5,045 notices were issued to rectify these defects and 397 prosecutions launched for failure to comply with the terms of the notices issued. As a result of the action taken by the divisional staff 4,204 houses were repaired and improved.

Offensive trades:—16,583 applications for licences to conduct offensive trades were recieved and dealt with during the year. 15,977 were sanctioned and others refused. 569 prosecutions were launched for running offensive trades without licence and 143 prosecutions were launched for contravening the conditions of licence. 97 lodging houses were registered under the Public Health Act.

963 licensed cattle-yards existed at the beginning of the year. 717 cattle-yards were not in a fit condition to be licensed. 1,056 notices were issued to effect improvements to insanitary cattle-yards and 145 prosecutions launched for failure to comply with the terms of the notices issued. The closure of 84 cattle-yards was effected as a result of action taken.

The public cattle-yards at Basin Road and Purasawalkam continued to be at the disposal of the Madras Co-operative Milk Supply Union. The public cattle-yards in Chintadripet and Triplicane were maintained in a sanitary condition.

The Corporation dhobykhanas in Robinson Park, Conransmith Nagar, Venkatathri Naicken Street and Chetpet functioned satisfactorily. In the Conransmith Nagar dhobykhana a flushout latrine with 2 seats (one for each sex) was constructed.

The dhobykhana in Kosapet, Mylapore, worked satisfactorily. This is provided at present with 14 stones for washing clothes. The construction of a dhobykhana in New Washermanpet was completed during the year.

Anti-rabic measures:—The Superintendent, Lethal Chamber, with the aid of 10 persons licensed as dog-catchers seized 23,588 dogs found straying in public places in the city. Of these 12,358 were bitches.

21,779 dogs were electrocuted and 120 dogs were given to the Medical Colleges in the city. 1,563 dogs were claimed by owners and returned to them.

156 complaints about nuisances from dogs were received and attended to. The dogs complained of were caught and destroyed.

179 pigs found straying were seized by licensed pig-catchers. 163 of these stray pigs were released and 16 were sold by auction. All of them were subsequently slaughtered in the Pig Slaughter House.

Food control:—42 private markets in the city were under the constant supervision of the divisional Sanitary Inspectors. 7 of the larger markets continued to remain under the direct supervision of whole-time Market Superintendents.

In Musa Sait Market the stalls were provided with electric lights. In Mylapore Market additional latrine seats were provided. Licence to run Kanniah Reddi Market in Aminjikarai was refused and the market was closed in the year. Jubilee Market and Rasappa Chetty Street Market continued to remain closed.

Corporation markets in Iyanavaram, Saidapet and Thyagarayanagar besides Smithfield Market, Mallaya Market, Fruit Market and Moore Market were kept in a sanitary condition. Extensive repairs were done to the Iynavaram Market. Fruit Market and Moore Market continued to be under the special care of whole-time Superintendents. In Fruit Market additional stalls were constructed in the eastern and western sides and let out. In Moore Market 21 new stalls were constructed and let out to cloth dealers. The construction of 82 more stalls was under progress. Repairs to the restaurant building in the first floor of the Evening Bazaar and to the cages of fowl stalls in Moore Market were carried out.

The use of D. D. T. is being insisted upon to keep down the fly nuisance.

Meat supply:—There were 2 Sheep Slaughter Houses, one Cattle Slaughter House and one Pig Slaughter House in the city. 4,91,538 animals were brought for slaughter in these Slaughter Houses. 11,678 of these

animals were in unhealthy condition and they were not allowed to be slaughtered. 8 car casses and 25,292 organs unfit for human consumption were destroyed. Details of animals slaughtered in each Slaughter House are given below:—

		o. of animals brought for slaughter	No. of animals slaughtered	No. of carcasses condemned	No. of organs condemned
Sheep Slaughter Houses	• • •	4,55,013	4,44,449	4	<b>13,</b> 033
Cattle Slaughter House	• • •	27,715	26,601	2	11,276
Pig Slaughter House	•••	8,810	8,810	2	<b>9</b> 83
Total	• • •	4,91,538	4,79,860	8	25,292

Every carcass permitted to be taken outside the Slaughter Houses to be sold in the city was stamped with an indelible mark for the purpose of identification. The divisional staff regularly inspected the mutton stalls in the markets and in other places to prevent the sale of unauthorised and unwholesome meat. There were 226 licensed mutton stalls in various parts of the city.

A Veterinary Clinical Laboratory began to function from the month of July in the year. This laboratory is equipped for undertaking the examination of blood smears, urine, faeces and pathological specimens from the Slaughter Houses and conservancy cattle-depots. 452 examinations were done in the laboratory before the year ended.

Weights and measures:—The 2 Inspectors of Weights, Measures and Scales systematically inspected all public and private markets, rice, fire-wood, sugar, bread and kerosene ration shops, provision stores, oilman stores and other shops and scrutinized the scales, weights and measures found with the shop-keepers. They also intercepted itinerant vendors and examined the scales, weights and measures in their possession.

The shop-keepers in the city were found to use scales, weights and measures duly tested and stamped. Unstamped scales, weights and measures were immediately tested with the aid of the standard ones in the possession of the Inspectors and seized to prevent their being used even inadvertently as genuine weights. Their use even as counterpoises by the shop-keepers was not permitted. Scales, weights and measures not stamped in the year under report or found with the marks of stamping indistinct or obliterated were also tested and, if they were found to be accurate, the shop-keepers were required to have them stamped forthwith. The improvised measures used for selling gingelly oil and cocoanut oil by viss and palams were seized and their capacity verified. The merchants selling these oils were required to use scales provided with bowl shaped pans for holding the oil to be weighed and sold.

Itinerant vendors were mostly found to use scales, weights and measures stamped in the mofussil areas. The Inspectors had such scales,

weights and measures verified with the standard ones they had with them and seized defective ones. Such seizures consisted mostly of measures used by curd vendors and weights used by petty vegetable vendors.

The total number of scales, weights and measures found defective and seized was 1,393 which consisted of the following:—

Scales	315)		
Weights	545	W-4-1	1 900
Measures	523	Total	1,393
Spring balances	10 j		

A bottle used as 1/6 of a gallon was seized from a toddy shop and 2 glass tumblers used as 1/2 pint measures were seized from country liquor shops and reported to the Excise authorities to be dealt with by them. 143 weights kept for use as counterpoises were seized and confiscated. 37 improvised measures purporting to be 1/2 viss, 1/4 viss and 1/8 viss in capacity were seized and confiscated.

In 166 cases prosecutions were launched. Among those prosecuted there were 10 rice ration shops, 1 bread shop, 23 fire-wood ration shops, 16 sugar ration shops, and 8 cloth shops. In 159 cases the offenders were convicted and fined. The total amount realised by way of fines and fees was Rs. 2,588-8-0. 4 gingelly oil sellers were prosecuted for using improvised measures which were found to be deficient in capacity to hold the quantities of oil they were intended for.

The Inspectors counterchecked the weight or quantity of articles sold to prevent the malpractices of under-measurement and under-weighment As under-weighment was practised mainly by the fraudulent manipulation of scales, vendors were required to replace the wicker pans with iron pans and the strings with chains and to clean the pans constantly. To prevent the fraudulent manipulation of palam weights in selling mutton by seers, the Inspectors continued to check the weights of mutton sold and to insist on the scales being so suspended as to enable the purchasers to see the pans as well as the weights used.

The flower merchants were prevailed upon to sell flowers by 8 palams (1 ordinary seer) and not by 7 palams as they had been doing. 4 flower merchants who failed to do so were prosecuted and were convicted and fined. Two merchants dealing in slaked lime and lime-shells were prosecuted for using baskets as parah measures and convicted and fined.

In kerosene ration shops the Inspectors not only counter-checked quantities of kerosene given as ration but also measured out the oil to the purchasers and instructed them to adhere labels to indicate the correct level when properly measured.

14 cases of under-measurement and under-weighment in kerosene, bread and fire-wood ration shops were intimated to the Ration authorities to be dealt with by them.

and the state of t

Care of destitutes:—In the Poor House destitutes seeking admission voluntarily were admitted and cared for. There were 113 admissions in the year. The strength of the home during the year was as follows:—

	•	•	Males	Females	Total
No. of inmates on 1-1-1947	4.3	Fig.	89	42	131
No. admitted in 1947		,	69	44	113
No. discharged in 1947	•		51	32	83
No. died in 1947.	10.	3	25	15	40
No. escaped in 1947			14	•••	14
No. of inmates on 31-12-1947			<sup>2</sup> 68	39	107

92 inmates were sent to the Government Stanley Hospital for specialised treatment and 22 of them died there.

The inmates were given special feeding on 12 festive occasions and on the birth-day of His Highness the Maharajah of Travancore out of the interest accruing from endowments made for the purpose. A special feed was given on 24-12-1947 out of the donation given by the Government Official's Party.

The Special Home for the diseased and infirm completed a year of useful work. 217 diseased and disabled beggars were committed to its care and the strength of the home rose from 234 at the beginning of the year to 324 at the end of the year. Details regarding the strength of the home are furnished, according to sex, below:—

Particulars		Ad Men	ults Women	Children	Total
No. of inmates on 1-1-1947	}	205	29	1*	234+1*
No. admitted in 1947	}	155	62	•••	217
No. transferred from Work House	}	25	•••	•••	25
No. discharged in 1947	}	16	•••	1*	16+1*
No. released by orders of the High Court	5}	1	- 4	•••	5
No. transferred to Work House	}	21	•••		21
No. escaped in 1947	}	11	•••		11
No. died in 1947	}	80	19	•••	99
No. of inmates on 31-12-1947	}	<b>2</b> 56	68		324

69 of the inmates suffered from leprosy, 23 from tuberculosis and 56 from debility, malnutrition, and emaciation. 15 of the inmates were blind and 12 were infirm. The other inmates suffered from diseases of the nervous, circulatory and digestive systems, of bones and joints and of liver and spleen, venereal diseases and other diseases like elephantiasis and asthma.

All of them were given suitable treatment and they showed remarkable inprovement in their condition. 11 inmates were sent to Government hospitals for specialised treatment.

The Independence Day on the 15th of August was celebrated with great eclact by the inmates. They had a special breakfast in the morning. Clad in new clothing presented by the Worshipful Mayor they saluted the national flag in a march past. After a special feed in the evening they sang national songs and offered prayers for the peace and prosperity of free India. In the night they were entertained with a display of fire-works.

A big cistern with a capacity of about 800 gallons of water was built to enable 50 inmates to have their bath at a time. This facilitated the conversion of the 6 bath rooms in the male section into 6 flushout latrines. A radio receiving set was installed for the benefit of the inmates.

Amendments and additions to the rules of the home were made and remission in the period of committal for good conduct was introduced.

The inmates evinced interest in growing vegetables and greens in the garden. They also helped in pumping water to the over-head tank, in keeping the home and garden clean, and in bathing the infirm and blind. Female inmates helped in cleaning rice, dhal and in cutting vegetables.

The Commissioner, the Health Officer and the Assistant Health Officer Inspected the Home several times. The Collector of Madras, Inspector General of Prisons, the Chief Presidency Magistrate and the Commissioner of Police also paid visits to the institution.

Among the distinguished visitors to the Home were the Minister for Prohibition and Transport, Minister for Local Self-Government, the Deputy Mayor of Colombo, and the Director General of Medical and Sanitary Services, Ceylon.

The Work House continued to be under the supervision of the Superintendent, Poor House. There were 2 instructors, 12 male wardens and 6 female guards. One of the instructors taught the male inmates rattan work and the other instructor taught them mat and tape weaving, rope making and spinning. 2 of the women guards were selected to give instruction in stitching and lace work to the female inmates.

The no. of inmates admitted and discharged is set forth below:

		Males	Females	Total
No. of inmates on 1-1-1947		93	16	109
No. admitted in 1947	•••	94	14	108
No. discharged in 1947	• • •	68	11	79
No. died in 1947		6	• • •	6
No. escaped in 1947		10	•••	. 10
No. of inmates on 31–12–1947		103	19	122

25 inmates not fit for manual labour were transferred to the Special Home and 1 inmate of unsound mind was transferred to the Government Mental Hospital.

Thread spun by the inmates was used for weaving tapes. Some of the rattan articles and rope made by the inmates were sent to the Corporation

General Stores. Other articles were exhibited for sale and a sum of Rs. 228-13-3 was realised by their sales.

The Independence Day on 15-8-1947 was declared a holiday for the inmates. They took part in the prayer and flag hoisting ceremony and witnessed the march past of the wardens in uniform. They had a special feed given by the late Honourable Mr. Daniel Thomas, then Minister for Prohibition and Transport. There was a musical performance in the evening to entertain the inmates.

The Inspector General of Prisons, the Commissioner of Police, the Health Officer and the Assistant Health Officer paid several visits to the institution.

The Minister for Prohibition and Transport, Madras, the Minister for Public Health, Cochin, Honorary Adviser to the Commissioner of Civil Supplies, District Health Officer, Delhi, and the Municipal Engineer, Mysore, visited the institution in the year. The Minister for Prohibition and Transport was pleased to observe that since he opened the institution in 1946 a good deal of useful work had been done to put on the inmates to some useful vocation.

Vocational training in weaving was introduced in the year. Inmates were taught to weave bandages, bed-sheets and towels. Khadi weaving on a minor scale had also been started. The yarn spua by the inmates was used for the purpose.

The rules were amended and remission in the period of committal for good conduct and other considerations was introduced. A radio receiving set was installed for the benefit of the inmates.

The Vagrant Children's Home was opened on 9-7-1947 by the Honourable Mr. O. P. Ramaswamy Reddiar, Premier of Madras.

This institution is an orphanage with facilities for educating the inmates. It is located by the side of the Poor House.

This institution is under the supervision of the Superintendent of the Poor House. There are 2 wardens, one for the day and the other for the night-

There is a trained woman teacher for teaching the children. She resides there and the inmates are under her control.

Admission is restricted to boys from 5 to 12 years of age. On admission each inmate is given 2 sets of uniforms, a mat, a pillow, a blanket, an aluminium eating plate, a side plate, and a tumbler. For the recreation of the inmates facilities for indoor games like chess and dice and for out-door games like foot-ball and tennikoit are provided. A room is set apart for the use of sick inmates and cases of minor ailments are treated by the Superintendent.

The inmates are given 2 meals a day besides canji in the morning and ground-nut kernels with jaggery in the evening.

In the following statement information is furnished regarding the number of inmates admitted and discharged:—

$$\begin{array}{c} \text{No. admitted from} \\ 9-7-'47 \text{ to } 31-12-'47 \end{array} \right\} \qquad ... \quad 34 \qquad \begin{array}{c} \text{No. escaped} \\ \text{in } 1947 \end{array} \right\} \qquad ... \quad 6 \\ \text{No. discharged} \\ \text{in } 1947 \end{array} \right\} \qquad ... \quad 7 \qquad \begin{array}{c} \text{No. of inmates} \\ \text{on } 31-12-'47 \end{array} \right\} \qquad ... \quad 21 \\ \text{H}--6 \\ \end{array}$$

The ages of the 34 inmates admitted in the year ranged from 6 to 12 as shown below:—

The Health Officer and the Assistant Health Officer visited the institution several times before the year ended.

Propaganda:—The inculcation of civic sense by means of propaganda was conducted throughout the year. 1,502 lectures on health subjects were delivered. The number of lectures which were accompanied by magic lantern shows was 70. About 945 talks on health subjects were also given. The total attendance of adults and children at these lectures and talks exceeded 90,000.

Zoological Garden:—9 animals were purchased and 5 animals were received as gifts. The number of births and hatchings among the animals in the zoo was 46.

There were 2 lions and an Arabian baboon among the animals purchased and a crocodile and 2 jungle cats among the animals received as gifts. 2 Nilgai fawns were among the animals born in the Zoo. This is the first occasion Nilgai deer have bred in the Zoo.

4 Wallabies were obtained in exchange for a pair of white pea-fowls. Being a species of Kangaroos, they are valuable acquisitions to the Zoo. 5 spotted deer, 35 common monkeys and 250 pigeons were sold for a sum of Rs. 455/-

There were 26 deaths among the live-stock in the Zoo. A tigress died of heart failure and a Wallaby died of enterities. A Nilgai fawn died as a result of accident. The other deaths were due to old age and natural causes.

The right of collecting the entrance fees was leased out for a sum of Rs. 30,000/- for 1947-48. The right of running the Zoo cafe was let on lease for a sum of Rs. 5,000/- for 1947-48. The income derived by hiring elephants to the public for use on ceremonial occasions and collecting stallage rent for animals kept in the Zoo on their way to other places was Rs. 2,767-4-0 for 1947-48.

The construction of the sheds for camels and emus was completed. The level of the enclosure for emus was raised to prevent inundation in the rainy season.

Boating:—7 boats plied in the Zoo lake. The right of plying these boats was leased out for a sum of Rs. 4,500 for 1947-48.

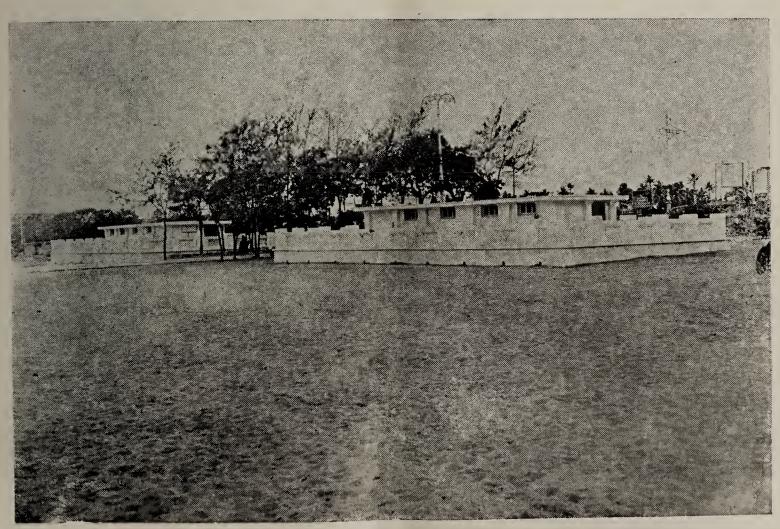
Swimming bath:—The supervision of the Royal Swimming Bath was transferred from the Health Department to the Works Department.

#### CONSERVANCY

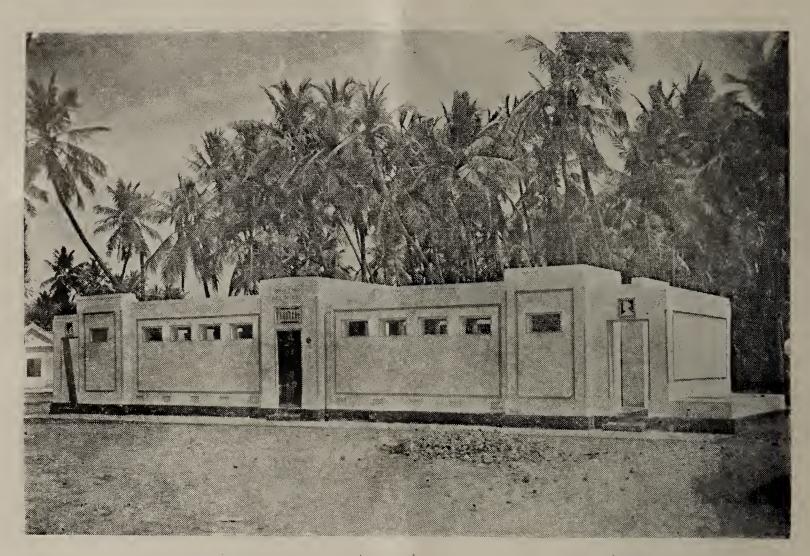
Conservancy of the city was under the control of the Assistant Health Officers and the Sub-Assistant Health Officer. There were five Supervisors in charge of the work in the five ranges into which the 50 divisions of the city were grouped. Divisions 17, 22, 35 and 48 were sub-divided for administrative purposes and a Conservancy Inspector was posted for work in each of



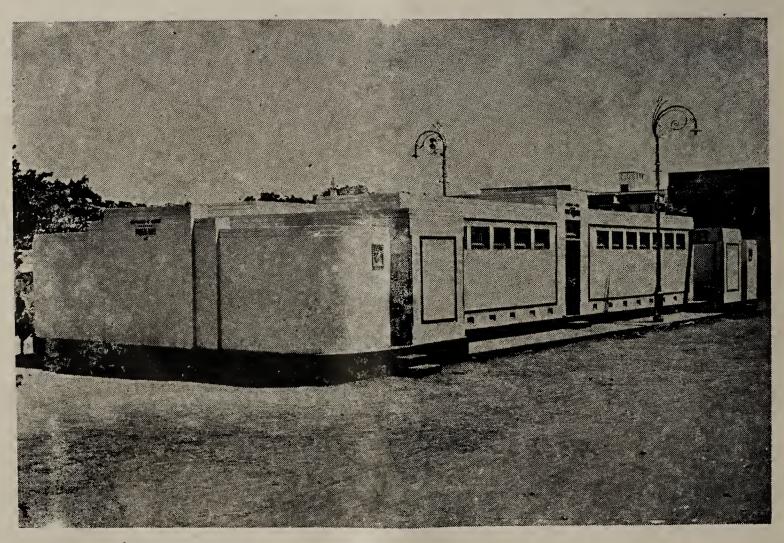
Reclamation of 'Arathakuttai' pond in Mylapore (Work in progress)



Public convenience opposite Presidency College, Marina (Semi under-ground type)



Public convenience and bath-room in Venkatakrishnan Street Old Washermenpet



Public convenience in Jonagancheri San Thome High Road

the bifurcated parts. There were 54 Conservancy Inspectors in charge of the work in the 50 divisions of the city. 2,400 coolies were employed for cleaning drains, water-tables and latrines. The total expenditure on conservancy for the year 1947-'48 was Rs. 24,72,781/- against Rs. 24,22,780/- for 1946-'47.

530 trollies and rubbish carts, 66 nightsoil carts and 177 sewage and silt carts were used for the removal of filth, sewage and silt in the city. 47 motor lorries were also used for the removal of rubbish and filth and 3 lorries for the removal of sewage. These lorries were marched out daily from the Lorry Station and the two cattle depots at Harris Road and at Krishnampet. The charges incurred for the use of these lorries amounted to Rs. 1,79,620 during 1947-'48.

Disposal of rubbish and filth:—About 6,28,976 cart-loads of rubbish were removed during the year. Of these, about 2,57,363 cart-loads were used for raising low-lands in the city and the rest of the rubbish was dumped at the Otteri, Korukkupet and Mylapore dumping grounds. The rubbish collected from Saidapet area was dumped at the Saidapet dumping ground.

About 26,263 cart-loads of filth were removed during the year. Of these, 15,976 cart-loads of filth were flushed into the sewers at the pail depot at Korukkupet and the remaining cart-loads were trenched at the dumping grounds in Otteri, Korukkupet and Saidapet. The amount realised by the sale of manure and cow-dung during the year 1947-'48 was Rs. 9,107. The tipping platforms in Basin Road and Krishnampet and the pail depot in Korukkupet worked satisfactorily.

Public latrines:—371 public latrines existed in the city during the year under report. Of these, 331 were of the flushout type and 40 were masonry and sanded latrines. 12 public conveniences were opened for public use during the year at the following places:—

Division No.	S. No.	P. C. No.	Location
. 2	1	114	Venkatesa Naicken St., Royapuram.
3	$\frac{1}{2}$	140	Mannar Swami Koil St., Royapuram.
$\frac{3}{4}$	$\frac{1}{3}$	115	Bishop Chery, Cemetery Road.
5	4	117	Within Corporation cattle yard, Basin Bridge Road.
9	5	80	Asirvadapuram, Vasamode Cheri.
22	6	162	Ormes Road, Kilpauk.
28	7	144	Junction of Memorial Hall Street and Mint Street.
34	8	141	Kodambakkam High Road.
<b>3</b> 9	9	178	Opposite Connemara Hotel, Binny's Road.
44	10	4	Behind Notchi Kuppam, Foreshore of the Marina,
			Mylapore.
50	11 .	54	Doming Kuppam (at the eastern end of the
			D'monte Street) Santhome.
43	12	145	Within the Corporation School, Lloyds Road.
•			

The public flushout latrines were kept open for use both day and night. The Drainage Superintendent with his staff of Overseers was responsible for the proper maintenance of the public conveniences in the city.

The conservancy staff paid special attention to the cleaning and disinfection of public latrines and of places where there was committal of nuisance. 416 gallons of disinfectants and 2,271 parahs of chunam and 9,995 lbs. of bleaching powder were used during the year for the disinfection of latrines, drains, road sides, etc. 721 persons were prosecuted under the Public Health Act for committing nuisances in public places.

Conservancy of private places:—The removal of rubbish and filth from several public institutions and private establishments in the city was undertaken as per section 197 of the City Municipal Act. The total amount realised by way of fees during the year 1947–'48 was Rs. 87,067/-

Labour:—In pursuance of G. O. No. 4942 L&M dated 22-12-1931 coolies retiring on account of old age and infirmity were granted bonus. 231 coolies were provided with tenements in the Corporation Model Lines and 248 coolies were allowed to live in huts on Corporation land.

Conservancy cattle depots:—There were 9 conservancy cattle depots. 5 depots were under the charge of veterinary graduates and the rest under Sanitary Inspectors during the year. The salary of the Veterinary Assistant Surgeons was revised during the year to be in accordance with the scale of pay of those in Government service.

With a view to improve the condition of the depots extensive repairs were undertaken. In the Mylapore and Saidapet depots the stalls were renovated. The Saidapet depot was provided with a septic tank.

Animals:—The number of animals on hand on 1–1–'47 was 815 bullocks. 172 bullocks were purchased during the year. 78 bullocks died during the year. 32 unserviceable bullocks were sold by public auction. There was a balance of 877 bullocks at the end of the year.

Out of 78 casualties, 54 bullocks died of old age and general debility, 7 of tuberculosis, 5 of anthrax, 1 of rabies, 1 of bovine lymphangitis, 1 of trypnosomiasis and 9 from other causes.

Anthrax:—There were 4 deaths from anthrax at the Mylapore depot and one death at the Saidapet depot. All the depot bullocks were promptly protected with anti-anthrax serum and no fresh cases occurred.

Tuberculosis:—There were 7 deaths from tuberculosis during the year compared to 20 deaths during 1946. All suspicious animals were immediately segregated at the Veterinary Hospital, Vyasarpady, and tested with the Tuberculine test and the reactors were treated.

Foot and mouth disease:—There was one case at the Basin Bridge depot in the month of February. The animal was isolated and precautions taken to prevent further spread of the disease. The disease was brought under control with one isolated case. In the month of December, the disease again broke out among the newly purchased bullocks. 29 bullocks were affected and they were immediately segregated at the Veterinary Hospital, Vyasarpady, for treatment. The disease was not allowed to spread to the other depots.

Rabies:—Six builocks of the Choolai depot were bitten by a rabid dog at the work-spot. They were immediately subjected to anti-rabic treatment at the Madras Veterinary College Hospital. But one of them developed rabies after 2 months and was destroyed.

Bovine lymphangitis:—There was one case of death from this disease.

Trypnosomiasis:—There was one case of death from this disease. The Superintendents of the depots were asked to take regularly blood smears of all the bullocks in the depots in their charge and send them for examination to the Veterinary Clinical Laboratory in the Sheep Slaughter House, Pulianthope. The bullocks which reacted for piroplasmosis and trypnosomiasis were immediately placed under a course of treatment. These contagious diseases were thus eliminated from the depots.

897 cases of illness were treated in the conservancy cattle depots and 238 cases were treated at the Veterinary Hospital, Vyasarpady.

Government of Madras accorded sanction for 7 breeding bulls to be maintained in 7 conservancy depots for the benefit of owners of milch cattle and they were also pleased to sanction 3 veterinary dispensaries, in the first instance, to be run by the Corporation of Madras. Provision was therefore made in the Corporation budget estimates for 1948–'49 for the above purpose.

### MOSQUITO CONTROL MEASURES

The staff in charge of mosquito control measures in the city consisted of a Medical Officer, 5 Supervisors, 8 Stegomyia Overseers, 48 Maistries and 198 coolies. 5 Supervisors looked after the work in the 5 ranges of the city and the Maistries and coolies were distributed for work according to the needs of the 50 divisions into which the city with the added areas has been divided.

Tanks and ponds:—There were 418 tanks and ponds in the city. 108 of these tanks were cleaned departmentally on payment of nominal charges by the owners. The cleaning of 8 private tanks was done free of charge on account of their receiving storm water from the surrounding areas. 286 tanks and ponds were cleaned by the owners themselves. The Supervisors inspected periodically such ponds and, whenever breeding of mosquitoes was noticed in any of them, the owners were required to take measures to prevent it. 10 Corporation tanks were also cleaned by the department and larvicidal fish were bred in them. Fish bred in these tanks were utilised by the staff for stocking wells, fountains, cisterns, etc., to destroy larvae breeding in them. 6 tanks became dry in the course of the year.

Wells:—There were about 20,175 wells in the city. A separate staff examined these wells periodically and stocked them with larvicidal fish after having them thoroughly cleaned. 174 wells were detected and 64 were found in a neglected condition and measures were taken to stop mosquitoes breeding in them. 350 wells had Cuddapah-slab coverings and 301 wells had trap-door fittings. 54 wells were filled up.

Anti-stegomyia measures:—These operations were conducted ½ a mile around the Madras Port Trust area. The stegomyia index ranged from ·07 to ·09 against 9·9 in 1936. The stegomyia house index was furnished to the Director of Public Health and to the Port Health Officer every month.

In the rest of the divisions of the city house inspection squads visited every building periodically and destroyed sources of mosquito breeding.

Public drains, cesspools, etc:-Covered and open drains, cesspools, gully traps, ditch drains, etc., in the city received constant attention from the staff. As a preventive measure against larval breeding, they were cleaned and oiled at least once a week. The cleaning of storm water drains was done by 100 main drain coolies who were deputed by the Special Engineer to attend to this work.

River Cooum and Buckingham Canal were kept clean by a river gang. To prevent the breeding of mosquitoes along the banks of these waterways special measures were taken by the gang.

Reclamation of low-lands:—The reclamation of the following low-lying places in the city was carried out during the year.

- 1. Low-lands in Big Mosque compound, Triplicane High Road
- 2. ,, ,, Spur Tank, Egmore
- 3. ,, behind Ripon Buildings
- 4. ,, by the side of S. G's Office, Teynampet
- 5. ,, in Tank Road, Nungambakkam
- 6. , , , Edward Park, Perambur
- 7. ", People's Park
- 8. , , Cochrane Basin Road
- 9. ,, Chellappa Mudaly Street, Washermanpet
- 10. , by the side of Dr. Ansari Road
- 11. , in Islambada, near Perambur
- 12. ,, Choolaimedu, Kodambakkam
- 13. ,, Thandavaroya Mudaly Street, Division 4
- 14. ,, Dr. Vijiaragavachari Road
- 15. ,, ,, Velacheri Road, Guindy
- 16. ,, Vasu Street, Poonamallee High Road
- 17. , , Boat basin, Workshop lane, Wall Tax Road
- 18. , , front of Perambur Railway Station, Perambur
- 19. ,, Foxen Street, Sembiam
- 20. ,, ,, Slaughter House
- 21. ,, ,, Arathakuttai, Mylapore

The filling up of "Arathakuttai", a pond in Mylapore, had been suspended in the latter half of the previous year. The water which had collected in the tank as a result of the monsoon rain in 1946 was pumped out and the work of reclamation was resumed in the month of April during the year under report and is in progress.

#### REPORT ON WATER ANALYSIS FOR 1947

General:—During the year under review, the lake water was chlorinated at the Kilpauk end of the raw-water conduit prior to filtration. The chlorinated raw-water was then filtered through a thin layer of about 6" of fine sand. The filtrate was again chlorinated and a 'safe' water was supplied to the city throughout the year. The present practice of filtering the lake water through the existing filters with no definite rate of filtration to remove gross impurities from the raw-water did not result in the production of an aesthetically good water. The major portion of the organic matter in the raw-water existed in a colloidal condition and passed easily through the filtering medium. To replace the present system of filtration, plans and estimates were being prepared by the Water Works Engineer.

The average quantity of water filtered daily during the year was 24.49 m.g.d.

Red Hills Lake:—The total rainfall recorded during the year in the lake region was 29.9" as against '77.55" in 1946. The lake water was examined in February, June, July, September, October and November during the year. The increasing figures for "Albuminoid Nitrogen" and "Absorbed Oxygen" showed that the raw-water contained an excessive amount of organic matter of vegetable origin and this was inversely correlated with the lake level.

The bacterial quality of the lake water was fair in February and June and showed slight deterioration in July; it was fair again from September to November.

Raw-water (prior to chlorination) at the Kilpauk end of the conduit:—The figures for "Albuminoid Nitrogen" and "Absorbed Oxygen" increased from January to October and thereby showed that the organic content in the raw-water increased during these months and reached the maximum in October.

The bacterial quality was fair (L. F. in +5 c.c. and upwards in 50% to 80% of the samples collected) during January, February, May, June, July, August and September and was of higher standard of purity (L. F. in +10 c.c. in 5% to 30% of the samples collected) during October, November and December; but it deteriorated during March and April.

Chlorinated raw-water:—Chlorination of the raw-water brought about a marked improvement in the bacterial quality of the raw-water almost throughout the year.

Chlorinated filtered-water:—The chlorinated raw-water was passed through a thin layer of about 6" fine sand in the 17 sand filters, which were worked with no fixed rate of filtration, with the result that the chemical quality of the filtrate was not quite satisfactory. The filtrate however was effectively chlorinated again so that the yearly average figure of first class samples (L. F. in -60 c.c.) came upto 100%.

Chemically the figures for "Ammoniacal Nitrogen" varied from a minute trace to 0.003 parts per 100,000, those for "Albuminoid Nitrogen" from 0.012 to 0.041 parts per 100,000 and those for oxidisable organic matter

(Tidys) from 0.078 to 0.141 parts per 100,000. The dose of chlorine applied to the filtered water varied from 1.02 p.p.m. to 1.12 p.p.m. for the year.

Test-tap at K. P. S.:—Samples of water drawn from the test-tap at K. P. S. were examined daily. The chemical and bacterial qualities of the samples were almost the same as those of the chlorinated filtered water. The bacterial quality was good during January, February and March, fair during April and May and again reached a high standard of purity from June to November.

The average rate of reduction of organic matter, when compared with that of the raw-water, was from 20.8% to 45.7%. An excess of free chlorine at about 0.2 p.p.m. was always maintained at the test-tap at K. P. S.

Distribution system of the city:—On the bacteriological side lactose fermenters were absent in 60 c.c. and upwards in 68.5% of the samples examined during the year and on the chemical side an all round reduction in the figures for important chemical constituents as compared with the figures for those of the test-tap was noticed.

Water supply in the extended areas:—In both the extended areas of the city, viz., Saidapet and Sembium, the sources of water supply are infiltration gallery wells. The water supplied from the infiltration gallery well in Saidapet needed only bacterial purification. The water was chlorinated with the chlorine available in the bleaching powder solution, as it was pumped into the overhead tank. The water supplied from the infiltration gallery well in Sembium required addition of lime and bleaching powder after it had been pumped in the overhead reservoir. In both the Saidapet and Sembium areas the water supply was restricted to limited areas owing to the limited capacity of the sources of supply. Outside these limited areas, such as Aminjikarai and Adyar, people had to draw water from wells in their own houses and bore-well pumps erected by the Corporation.

Raw-water of Saidapet:—The raw-water was found to be sparkling and crystal clear throughout the year. Its bacterial quality was fair, lactose fermenters being present in 20 c.c. and upwards. The chemical quality was uniformly good though there was slight deterioration in March and November.

Distribution system of Saidapet water supply:—Chemically the samples collected from the distribution system were of uniformly good quality throughout the year though nitrates were invariably present in almost all the samples examined during the year. The bacterial quality was fair during March and June; but it fell off during August and November.

Raw-water of Sembium:—The bacterial quality was uniformly fair throughout the year. On the chemical side, the water was of good quality during April but fell off slightly in quality in October. In April the water was colourless and clear but in July its physical appearance became yellowish and hazy due to the suspension of ferrous iron.

Distribution system of Sembium water supply:— Chemically, the samples collected from the distribution system were of good quality in April but showed a slight deterioration in October. The bacterial quality of the water was good in April but fell short of the standard in October.

## REPORT OF THE PUBLIC ANALYST FOR THE CITY OF MADRAS FOR 1947

- 1. During the year 1947, the number of samples analysed under the Madras Prevention of Adulteration Act, 1918, was 3,229 as against 2,665 in 1946. Of the 3,229 samples analysed in 1947, 1,929 samples were genuine and the remaining 1,300 samples were found to be adulterated. The percentage of adulterated samples during the year under report was 40·3 against 38·4 in 1946. As in 1946, the high percentage of adulteration in 1947 was due to the fact that milk samples which formed 57 per cent of the total samples in 1947 continued to be highly adulterated during the year under report.
- 2. The samples eonsisted of milk, butter, ghee, gingelly oil, groundnut oil, cocoanut oil, coffee powder, tea, ghee substitutes and other articles. A statement of the samples analysed during 1947 and the five previous years is given in a tabular form (Statement No. I). A graph showing the number of samples analysed and the percentage of adulteration each year from 1931 is also appended to the report.
- 3. 64.5 per cent of the milk samples were adulterated in 1947 against 64.6 in 1946. In spite of increased number of samples, the adulteration of milk continued to be high. As pointed out in my report for 1946, the tendency to adulterate may be traceable to the shortage of supply, the prevailing high price of milk and the case with which milk can be adulterated. Under the circumstances mentioned above, the adulteration of milk can be effectively suppressed by much heavier fines being imposed in cases of adulteration. The fear of a heavy fine would no doubt make a milk vendor feel that adulteration would not be worth-while. The production of milk should also be eonsiderably augmented and the price of milk brought down Adulteration of butter during 1947 was slightly lower to a reasonable level. than in 1946, the respective figures being 18.8 per cent and 22.0 per cent. In the case of ghee, 5.2 per cent of the samples were adulterated as against 6.7 per cent in 1946. The improvement in the quality of ghee noticed in 1946 continued during the year under report. Adulteration of gingelly oil continued to be low. There was a decrease of adulteration in the case of groundnut oil. In the case of cocoanut oil, there was a remarkable improvement. The percentage of adulteration fell from 31.1 in 1946 to 1.8 in 1947. Adulteration of coffee powder which was not noticeable in 1946 reappeared in 1947 probably due to the scarcity of coffee powder during the year under report. The sampling of coffee powder has since been increased and it is hoped that the adulteration of this article would not continue long. There was no adulteration in the case of tea samples.

The details regarding the various articles of food analysed during the year under report are given below.

Milk: 1,840 samples were analysed. Of these, 904 samples were cow's milk, 650 were buffalo's milk, 189 were described as mixture of cow's and buffalo's milk and 97 were described as milk without the qualification of cow's or buffalo's.

Of the 904 samples of cow's milk, 542 samples were found to be adulterated. 533 of these contained added water ranging from 2 per cent to 78 H-8

per cent, 5 samples were deficient in fat from 30 per cent to 53 per cent and 4 samples contained added water and were in addition deficient in fat.

Of the 650 samples of buffalo's milk, 448 were adulterated. The adulteration in all the samples was by addition of water, the percentage of added water varying from 2 per cent to 72 per cent. There was no fat deficiency in any of the samples.

Among the 189 mixture of cow's and buffalo's milk, 141 contained added water ranging from 2 per cent to 69 per cent. Of the 97 samples of milk not described as cow's or buffalo's, 55 contained added water ranging from 2 per cent to 67 per cent.

Butter:—223 samples were analysed, of which 42 were reported as adulterated. 41 of the adulterated samples contained water in excess of the prescribed maximum limit of 20 per cent. The water content in these samples ranged from 22·2 per cent to 70·3 per cent. The remaining adulterated sample contained 28 per cent foreign fat.

Ghee: 459 samples were analysed and 24 were found to be adulterated. The common adulterant was hydrogenated groundnut oil and the extent of adulteration varied from 15 per cent to 94 per cent.

Gingelly oil:— 374 samples were analysed, of which 31 were found to be adulterated with groundnut oil. The extent of adulteration ranged from 10 per cent to 65 per cent.

Groundnut oil:- 40 samples were analysed, of which 2 were certified as adulterated. 1 adulterated sample contained 60 per cent gingelly oil and the other 90 per cent gingelly oil.

Cocoanut oil:—113 samples were analysed, of which 2 were found to be adulterated with groundnut oil, the percentages of adulteration being 20 and 45 respectively.

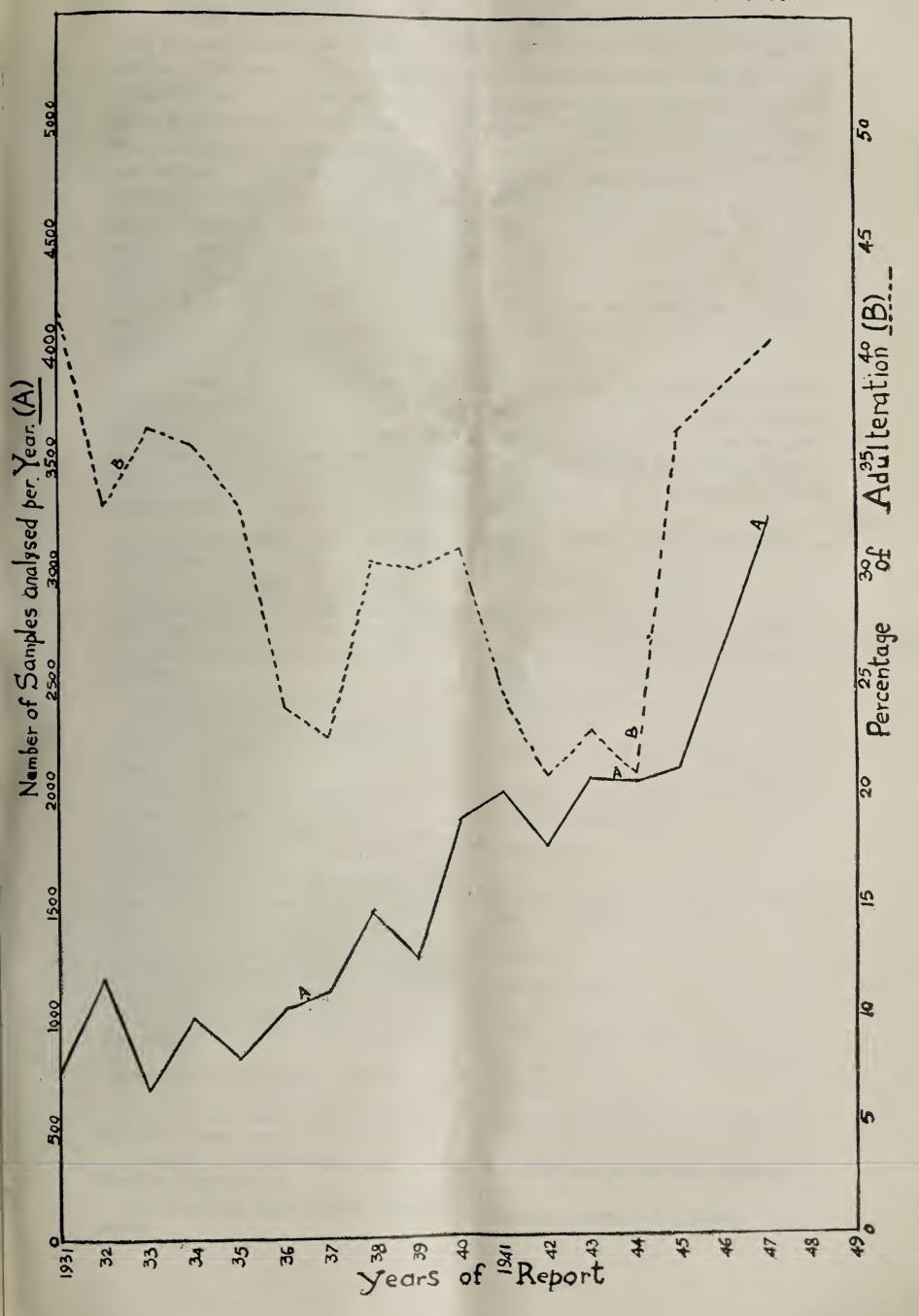
Coffee powder:—114 samples were analysed, of which 111 were coffee powder and 3 were coffee tablets. Amoung the 111 samples of coffee powder, 4 were adulterated. Two of the adulterated samples contained 60 per cent each of the prepared seed of Spermacoce hispida (Tamil – Nattaichuri, Telugu–Madanagrandhi and Hindi–Madanaghanti). One sample contained 50 per cent Spent (Exhausted) coffee and 30 per cent chicory and one sample contained 25 per cent of a preparation of an unidentified seed. The three samples of coffee tablets contained coffee and chicory. The proportion of chicory in the case of two samples had been correctly labelled in accordance with the provisions of the Madras Prevention of Adulteration Rules, 1932, and no action was therefore called for. In the case of the third sample, the vendor was warned for not labelling the chicory content correctly.

Tea:- 33 samples were analysed and all were genuine.

Ghee substitutes:—6 samples were analysed. 3 samples consisted of 100 per cent hardened vegetable oil. The remaining 3 samples contained ghee ranging from 5 per cent to 11 per cent in contravention of Rule 28 of the Madras Prevention of Adulteration Rules, 1932.

MADRAS CITY

GRAPH SHOWING THE NUMBER OF SAMPLES ANALYSED AND THE PERCENTAGE OF ADULTERATION EACH YEAR FROM 1931 ONWARDS.





Other articles:—These comprised 1 sample of cake described as Seed Cake prepared with pure butter, 1 sample of Kusumba (Safflower) oil and 25 samples of turmeric. The sample of cake contained 27 per cent fat, which on analysis was found to consist of a mixture of 54 per cent of genuinc butter-fat and 46 per cent of other fat. The sample of Safflower oil was genuine. The samples of turmeric were analysed in order to estimate the amount of lead in them. The lead in turmeric is derived from lead chromate which is used to coat turmeric, especially that of inferior quality, in order to give it a better colour and appearance. Lead being a cumulative poison, the above practice should be put down effectively. Of the 25 samples of turmeric analysed, 4 samples contained lead in excess of the prescribed maximum limit of 5 parts per million. Three of the adulterated samples contained between 5 and 20 parts per million of lead, but one contained as high as 105 parts per million of lead.

Besides the samples formally taken under the Madras Prevention of Adulteration Act, 1918, and dealt with above, 414 miscellaneous samples were examined in the laboratory during the year under report. The samples comprised 372 miscellaneous samples sent by the Health and other Departments of the Corporation, I.R.B.S.D., Avadi, etc., and 42 samples sent by private parties on payment of the requisite fees.

A statement of the samples sent by the Health Department, etc., is given below:—

Nature of Samples

108 samples of canned and other of food from I.R.B.S.D., Avadi, etc.

8 samples of raw rice bran (Tender) samples).

2 samples of wheat bran.

70 samples of milk powder sent by Corporation schools on suspicion about quality.

22 samples of transformer oil sent by the Electrical Department.

13 samples of Toovar dhal sent by Health Department.

3 samples of dhal suspected to be Kesari dhal sent by Health Department.

1 sample of Arrowroot

2 samples of bread sent by Health Department.

2 samples of cakes sent by Health Department.

2 samples of bleaching powder.

Calcium gluconate ampoules from Health Department.

1 sample of dehydrated cgg from Health Department.

Caffeine citras from Health Department.

#### Report

13 unfit for human consumption.

Report was made on the order of samples according to quality.

One was reported as inferior quality

52 unfit for use for school children.

Report on the inorganic and organic acidities was made.

All genuine.

All reported to be Kesari dhal or dhal of Lathyrus sativus.

Genuine.

Quality normal.

Both of good quality.

2.5 and 16.4 per cent available chlorine.

Unfit for purposes of injection.

Genuine and fit for consumption.

Sample consisted of caffeine.

1 sample of milk from Health Department.

Pepartment.

1 sample of Tea Dust from Health \( \)

Department.

1 sample of Gingelly Oil from
Health Department.

2 samples of Jam.

Raisins from Health Department.

123 tins of a brand of condensed milk.

7 tins of condensed milk of another brand.

Genuine.

Genuine.

Genuine.

Unfit for consumption.

Unfit for consumption.

Consignment reported unfit for consumption.

Coloured and thickened due to ageing. Not recommended for children and invalids.

The samples sent by private parties comprised 18 samples of Ghee, 3 samples of Butter, 2 samples of Gingelly Oil, 14 samples of Cocoanut Oil, 1 sample Pea-nut Butter, 1 sample of Evaporated Milk, 1 sample of Toovar Dhal and 2 samples of cakes. The analysis was mainly required for an opinion about the genuineness of the article, but in a few cases the samples were sent for analysis for other purposes such as an opinion about fitness for human consumption, etc. The amount of fees collected during the year under report was Rs. 275/- as against Rs. 45/- during 1946.

During the year under report, samples from a large consignment of a particular brand of condensed milk were examined at the instance of the Chairman of the Health Committee, Corporation of Madras. It was found that the contents of more than 90 per cent of the tins were decomposed and unfit for human consumption. A report was made by me accordingly on which the whole stock of condensed milk offered for sale in the city was seized by the Health Department. The Government Analyst also gave a similar opinion as regards the quality of the condensed milk under reference. The Government of India finally arranged for the dumping of the whole stock of the condensed milk into the sea.

In June 1947, information was received from mofussil places, especially Virudhunagar, that the consumption of Burma beans (*Phaseolus lunatus*) produced very severe illness. A few deaths were also subsequently reported. The Health Department secured the whole stock of Burma beans in the city. Samples of the beans were analysed in my laboratory and a report on the subject was made to Government. The Burma beans imported into Madras were of four varieties, namely (1) Red (Sultani) beans (2) White beans, large (Butter beans) (3) White beans, small and (4) Mottled beans. All the varieties contained Hydrocyanic Acid. Quantities of Hydrocyanic Acid present in the different varieties were as follows:—

	Variety of Beans	Hydr	ocyanic Acid in parts per million
1.	Red (Sultani) beans	• • •	90 to 150
2.	White beans, large (Butter beans)	•••	70 to 130
3.	White beans, small	•••	150 to 4 <b>5</b> 0
4.	Mottled beans	• • •	100 to 550

It was decided by Government to permit the sale of Burma beans containing not more than 20 parts per million of Hydrocyanic Acid. Beans containing not more than 20 parts per million of Hydrocyanic Acid should be considered harmless for human consumption. A method for the processing of the Sultani and Butter bean varieties of the Burma beans was worked out in my laboratory and a report was made to Government. The method consisted in converting the beans into dhal, husk-free as far as possible, keeping the dhal immersed in about three times its weight of water for about 18 hours, and then sun-drying the dhal. The dhal treated by the above method was of good quality and contained Hydrocyanic Acid below the limit fixed by Government. The above method has since been accepted by Government as one of the approved methods for the processing of Sultani beans. The methods of processing the Mottled and White (small) varieties of beans are still under investigation.

A tabular statement of the action taken on the adulterated samples of 1947 and the adulterated samples of 1946 pending disposal on 1st January, 1947, is given in the Appendix (Statement No. II).

The number of samples reported as adulterated during the year under report was 1,300. Action taken in respect of these samples is given below.

Warning of vendors		27	cases
Seizure and forfeiture of articles of food	•••	3	,,
Prosecution of vendors	•••	1,270	,,
Total		1,300	,,

Of the 1,270 prosecutions launched, convictions were obtained in 879 cases, 4 cases were withdrawn and 387 cases were pending disposal on 31st December, 1947. Among the 296 cases of the previous year pending disposal in 1947, convictions were obtained in 273 cases.

The total number of convictions for the sale of adulterated food during 1947 was 1,152 against 783 in 1946. The amount of fines imposed in 1947 was Rs. 50,723/- against Rs. 36,980/- in 1946. The average fine per conviction during 1947 was Rs. 44/- as against Rs. 47/- in 1946.

During the year under report, there were three cases of warranty defence and the warrantors in all the three cases were convicted and fines amounting to Rs. 749 were imposed. There was one conviction under Section 14(3) of the Prevention of Adulteration Act for preventing the Food Inspector from taking a sample of milk and a fine of Rs. 50 was imposed. There was a case in which the sample bottle was snatched away forcibly from the Food Inspector. The case was dealt with by the Police Department under the Indian Penal Code and the two accused in the case were fined Rs. 100 each. Fines imposed in food adulteration cases are not sufficiently deterrent and the average fine in 1947 has actually shown a decrease from that of the previous year. I would like to point out again that there is absolutely no justification for imposing such low fines in food adulteration

cases. Unless much higher fines are imposed especially in the case of second and subsequent convictions, much headway cannot be made in the effective prevention of the adulteration of foods.

Before concluding, I have to refer to the sad and untimely demise of my second assistant, Mr. S. Balakrishnan in September, 1947. He joined my laboratory as my assistant in May, 1946, and served in that capacity for more than a year. He was very honest and hard-working and had a high sense of duty. I wish to place on record my appreciation of Mr. Balakrishnan's work.

V. VENKATACHALAM, M.A., A.R.I.C.

Public Analyst

# Report on the Working of the Port Health Department, Madras (Summary)

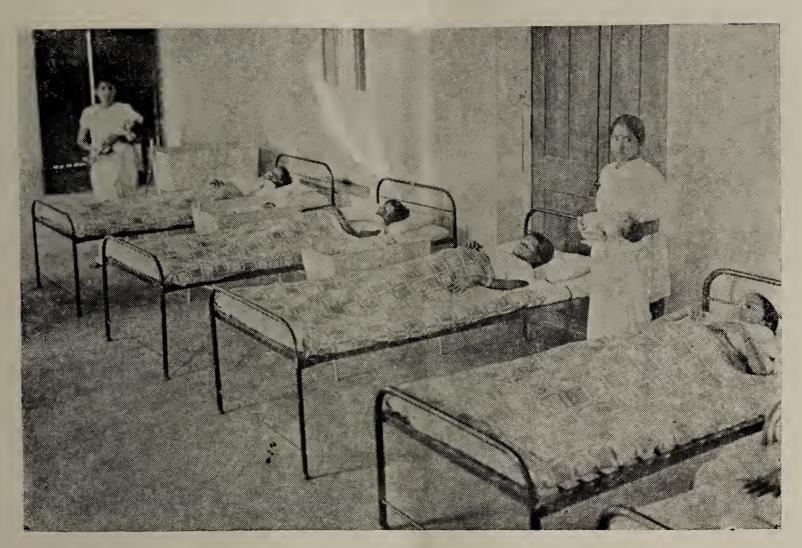
- 1. Out of 732 vessels arriving at this port, one vessel was infected with smallpox and six with chickenpox. From these seven infected vessels, one case of smallpox and 16 cases of chickenpox were landed. Necessary sanitary and preventive measures were taken. Total number of crew and passengers on these vessels were 52688 and 140929 respectively
- 2. Out of 734 vessels leaving this port, only 318 left for foreign ports and all these were inspected. Total number of crew and passengers inspected in these were 30269 and 56456 respectively. Three passengers suffering from chickenpox were prevented from sailing. Out of the crew and passengers leaving the port 94 crew and 668 passengers were not protected against smallpox. An endorsement to that effect was made on the respective Bills of Health.
- 3. Lascar provisions of 4 vessels were inspected. 6 bags of wheat flour were condemned as unfit for human consumption.

At the request of the Chairman, Madras Port Trust, 59 lots of old unclaimed foodstuffs were examined and all these were found to be unfit for human consumption and hence condemned to be destroyed.

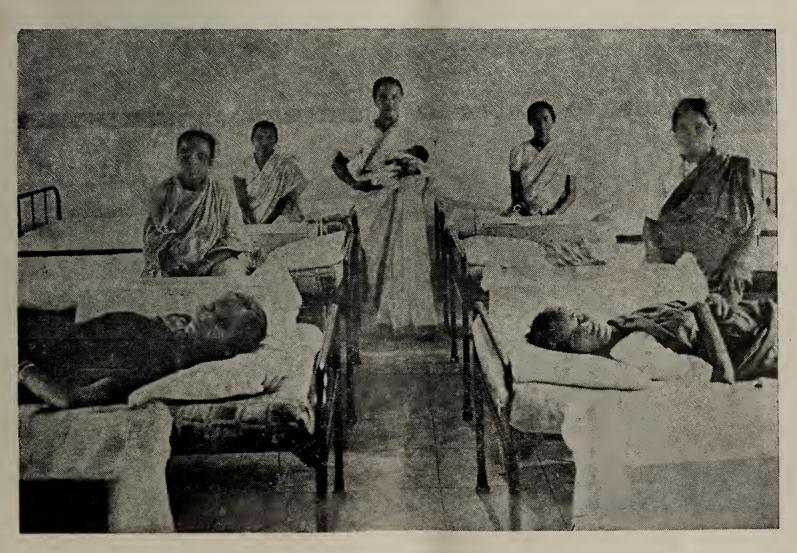
- 4. The Port Health Officer, Madras, continued to enforce measures to prevent ingress of rats into vessels lying in port.
- 5. Sanitation and mosquito control of the port area were looked after efficiently by the Madras Port Trust.
- 6. Water Supply:—The Port area as well as the ships were supplied with drinking water from the Corporation main through Port Trust reservoir tanks, which were periodically cleaned. No complaints received from the masters of ships regarding the quality of water during the year. Water barges were periodically cleaned and kept in suitable sanitary condition.

D, CHOUDHURY

said to the the said the said



A view of the maternity ward Child Welfare Centre, Kappal Polu Chetty Street



A view of the maternity ward Child Welfare Centre, Adyar



Children at play, Corporation Creche, Broadway.



Children taking meals, Corporation Creche, Broadway

## CHILD WELFARE SCHEME—ANNUAL REPORT FOR 1947

The continued progress and the growth of the Child Welfare Scheme in the city during the year 1947 will be evident from the following report. The remarkable features during the year were (1) a fall in the maternal and infant mortality rates, (2) the opening of a Maternity Home with 24 beds in a labour area and 3 more maternity centres in other areas and (3) the growing popularity of the Scheme especially among the middle and lower middle class people. The Scheme is becoming more useful day by day and continues to do very good work.

Centres: -At the beginning of the year, there were 21 child welfare centres and 12 maternity wards with 72 beds catering to the needs of the citizens of the city including the small centre run at the Theosophical Society, Adyar. Three more centres were opened at Tondiarpet, Kothwal Bazaar division and Adyar during the year as the maternity and child welfare work was extremely poor in these areas. The centres at Tondiarpet and Adyar have maternity wards attached to them. The Maternity Home at Choolai began to function from 29-8-47. This Home has 24 beds. A Medical Graduate with D. G. O. qualifications is in charge of the Home. The child welfare centre at Choolai was, therefore, shifted to Kappal Polu Chetty St., in the 4th division in March, 1948, as the need for a child welfare centre was keenly felt in that division. A child welfare centre and maternity ward with six beds sanctioned for Teynampet and Thyagarayanagar could not be opened owing to the non-availability of suitable buildings; hence, two small centres were opened on the 10th March, 1948, in the Corporation dispensaries at Teynampet and Thyagarayanagar and are run without any extra cost. With a view to give relief to women workers a day nursery or Creche was opened in Bunder Rama Naicken St., Broadway, by Her Excellency Lady Nye on 14-11-47. At present about 50 children are given shelter in this creche and looked after. It is in charge of Mrs. C. D. Manoharam, Lady Doctor, who visits it thrice a week. At present, there are 24 child welfare centres and 14 maternity wards with 84 beds and, in addition, two small centres are run, one at the Teynampet dispensary and the other at the Thyagarayanagar dispensary, as already stated.

Staff:—The Lady Superintendent, Child Welfare Scheme, continued to be in charge of the Scheme except for a period of 52 days from 10-5-47 to 30-6-47. She was granted leave on average pay and lady doctor, Capt. C. N. Rukmini, M.B.B.S., was appointed to act as the Lady Superintendent, Child Welfare Scheme. There were 26 lady doctors under the Scheme, of whom one was a relieving lady doctor. There were 27 qualified health visitors, 8 general trained nurses, 203 midwives and 22 compounders in the Scheme.

Pre-natal clinics:—As usual, pre-natal clinics were conducted thrice a week in each centre and expectant mothers were advised and instructed to attend these clinics by the health visitors and midwives during their home visits. 25,524 expectant mothers attended the clinics and sought medical advice and treatment as against 25,646 cases in 1946. Health visitors

registered 27,661 expectant mothers in the houses of the patients. Patients were advised by lady doctors and were followed up by health visitors till their confinement. The clinics continued to be popular and a large number of mothers had the benefit of the instructions, advice and treatment given at the centres.

Maternity service:—18,412 labour cases came under the observation and care of the Scheme, of which 15,396 were non-Muslims and 3,016 were Muslims. 4,193 births were conducted in the Corporation maternity wards during the year 1947. 129 were twins. The midwives paid 1,89,864 visits, the health visitors 1,86,931 visits and the lady doctors 25,222 visits in the homes of the patients.

A sum of Rs. 10,474 was realised as fees for maternity service rendered to persons whose income ranged from Rs. 81 to Rs. 200 p.m. against Rs. 5,653-8-0 for 1946. At its meeting held on 26-8-47 the Council revised the scale of maternity fees according to which free maternity service has been extended to persons whose income is Rs. 80 and below against Rs. 50 and below according to the scale fixed previously. From this, it is quite evident that the Scheme is gaining popularity not only among the poor and labour classes but also among the middle and lower middle class people.

Maternal mortality:—Out of 18,412 cases of labour that came under the care of the Scheme, 36 cases of maternal mortality were recorded as noted below which works out to 1.95 per mille against 2.5 per mille in 1946.

Child Welfare Scheme	• • •	5
Hospitals	* * *	<b>2</b> 8
Private doctors	• • •	2
Vaidyans	• • •	1

Infant mortality:—19,147 babies born in the year 1946 were kept under observation during their first year of life. There were 521 still-births. The mortality among live births was 1,459. 784 babies left the city or were otherwise not traceable; 16,383 infants were alive after completion of their first year of life. The infant mortality rate was 81.7 per mille against 102.8 per mille in 1946.

Out-patient clinics:—Out-patient clinics were held in all the centres by the lady doctors where infants, pre-school children, expectant and nursing mothers were examined, advised and treated for minor ailments. 37,345 infants, 20,557 toddlers, 47,642 nursing mothers, 25,524 expectant mothers represent the new cases that were treated and advised. The total number of new cases that attended the clinics was 1,31,068 and the number of old cases was 2,98,257 making a grand total of 4,29,325 cases.

Ambulance: -Two ambulance cars were maintained for removing emergent cases of labour to the hospitals in the city. 1,290 cases were removed to the hospital during the year 1947.

Milk supply:—The Milk Supply Scheme introduced in May, 1945, had to be stopped from 1-1-47 as the Government expressed their inability to supply milk to the Corporation free of cost. The Corporation had been supplying milk free of cost to deserving cases of expectant mothers and

infants under one year even prior to the introduction of the Scheme. Attempts were therefore made to revive the old system of supplying milk to priority consumers. The supply was started with two measures a day in the mornings in each of the child welfare centres from 1-9-47 and the quantity was subsequently increased to 3 measures a day per centre from 1-10-1947. This supply has been further increased to 6 measures, 3 measures in the morning and 3 measures in the evening, from 1-4-48, 56,257 infants, 8,619 expectant mothers, 10,189 nursing mothers and 26,215 toddlers received milk during the year 1947.

Her Excellency Countess Mountbatten of Burma visited the child welfare centre, George Town, and the Broadway Creche during her short stay in the city in January, 1948, and she was highly impressed by the high standard of care provided at both these establishments.

H. V. KAMALAMMAL Lady Superintendent, C.W.S.

A

ANNUAL FORM

S VITAL STATISTIC

Lat. 13.04° N. Long. 80.15° E Meteorological data of Madras (Meenambakkam) for 1947

|Heaviest|Number of rainy and over days  $0.10^{\circ}$ 19 12 <u>5</u> S 0 S 9 0 ೦ಾ G Rainfall hours in rainfall inches in 24 4.45 0.00 0.12 0.020.17 98.0 1.83 4.45 1.20 0.07 1:13 0.37 3.61 18 for the month inches 34.79 11.551.03 4.74 5.34 2.93 0.57 5.33 0.362.81 17 N540E N64°E N25°W N50°E N69°E N39°W N36°E 08.00 | 17.00 S39° E N83°W S89°E S49°E S45oE S36°E Sloe S45°压 tion of wind Mean direcin degrees : 16 N32°W S29°W Nog IS S64°W Nº868 S49°W S72°W 4°E S19°W 15 Z 08.00117.00 humidity Humidity Percentage of 23 69 65 09 55 64 89 63 69 64 47 69 63 14 133 93 94 79 76 69 56 10 85 87 87 78 81 81 Difference temp & temp. 10.7 14.5 10.3 12.6 11.7 2.01 11:3 00 00 00 11.9 0 6.1 1.91 10 12 between Mean  $\dot{\infty}$ 9.11 15.5 11.0 9.5 15.1 2.2 8.7 7.5 2.2 5.1 Dew 21 140.3 Mean 138.6135.2134.3 solar 144.4 131.4 130.4 127.0 131.2 131.7 127.7 142.1 131.7 radia Max tion TEMPERATURES 10 08.00 17.00 94 92 75 20 71 74 74 <u>න</u> 89 25 67 67 7 point hours Dew 0 C3 <u>~</u> 02 75 20 74 33 74 69 75 73 7 70  $\infty$ range temp cols  $\frac{1}{2}$  cols  $\frac{4}{4}$ -5 ( 2.92 83.5 Mean Mean 7.77 9.88 90.2 84.3 91.9 85.3 io 78.7 70 87.1 daily daily 77.1 82. 8 15.016.5 12.4 13.4 15.0 13.9 14.2 15.5 17.1 17.7 11.7 14.4 15.1 9 81.9 83.0 9.84 75.9 71.3 80.5 8.94 74.6 2.02 71.1 74.7 υE niM 10 Mean 6.06 92.0 0.66 1000.7 88.5 86.2 83.3 0.88 84.6 90.2 91.8 Fo xsM 4 Mean 1002.4 1003.9 Barometric pressure 1011.1 corrected for tempe-9.9001 1002.5to standard gravity 1010.5 1008.8 1004.6 1003.5 1001.3 1008.2 1011.4 1010.7 rature and reduced and mean sea level ಣ Hours 1013.7 1005.7 1007.6 1005.0 1013.7 1008.4 1006.0 1014.5 1012.2 1010.0 1011-3 1013.9 00.80 100 01 September Months November December February January 0ctober August

March

April

May

June

July

STATEMENT

VITAL STATI

Showing births, deaths, infantile deaths and death-rates registered in each division during 1947

registered 1,408 201.40 198.46 199.56 226.53 243.52 219.24 209.92 180.47 220.00 195.93 191.16 177.77 180.10 188.15 177.77 180.10 188.15 177.77 180.10 188.15 188.15 177.93 177.93 177.93 188.15 188.15 188.15 188.15 188.15 188.15 188.15 188.15 188.16 18 births 33 10 000 I 195 rate per Death Infantile 3862 3862 3863 1053 1136 7,087 Number of infantile deaths registered Total 3,763 Females 224 Males Total 29,979 Number of deaths registered 27.9 Females 15,700 Males  $\begin{array}{c} \mathbf{r}_{1} \\ \mathbf{r}_{2} \\ \mathbf{r}_{3} \\ \mathbf{r}_{4} \\ \mathbf{r}_{2} \\ \mathbf{r}_{3} \\ \mathbf{r}_{4} \\ \mathbf{r}_{2} \\ \mathbf{r}_{3} \\ \mathbf{r}$ 40,753 Total Number of births 20,111 Females 20,642 Males : Total Name of Division Egmore Thousand Lights Nungambakkam Pudupakkam Thiruvatteswaranpet Aynavaram Aminjikarai Kodambakkam Mambalam xtension Sowcarpet Peddu Naickenpet Trevelyan Basin Park Town menpel Komaleeswaranpet Kachaleesuwarkoil New Washermenp Royapuram Singara Garden Sanjeeviroyanpet Theagarayanagar Kothawal Bazaar Edapalayam Vyasarpady Perambur Choolai Chin dadripet Triplicane Zam Baza**a**r Saidapet Ammen Koil Seven Wells Purasawalka Vepery Napir Park Mirsahibpet Sembium Adyar E. Teynampet Muthialpet Korukupet Guindy Royapetta Мујароге Chepauk Harbour Kosapet Kilpauk Advar Added areas Serial Number

STATEMENT No. II

	Tota! births registered during the year	715 715 716 716 716 716 716 716 716 716	
	Decemper	881 1883 1883 1884 1884 1885 1885 1885 1885 1885 1885	
	November	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
	October	8.8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
£7	September	855 186 186 186 196 107 101 101 101 101 102 103 103 104 104 104 104 105 105 107 108 108 108 108 108 108 108 108	
th in 1947	3suSu√	89 101 101 101 101 101 101 102 103 103 104 104 105 107 108 107 108 108 109 109 109 109 109 109 109 109 109 109	
each month	\f n [\f	601 148 148 148 148 148 148 166 172 110 110 110 100 100 100 100 10	
during ea	əunſ	# # # # # # # # # # # # # # # # # # #	
	Мож	86 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
Showing births registered	lirgA	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ving bir	Матећ	136 1126 123 123 124 125 126 127 128 128 128 138 138 148 159 160 160 160 160 160 160 160 160 160 160	-,,,,
Shov	February	2,889	20012
	Jennery	42899244810000444442282424242424242424242424242424	7,100
		Total	
AL STATISTICS	Name of Division	New Washermenpet Royapuram Singara Garden Sanjeeviroyanpet Korukupet Harbour Muthialpet Korukupet Harbour Muthialpet Kothawal Bazaar Seven Wells Sowcarpet Peddu Naickenpet Trevelyan Basin Park Town Edapalayam Vyasarpady Perambur Choolai Kosapet Pura walkam Vyasarpady Perambur Choolai Kosapet Pura walkam Vyasarpady Perambur Chintadripet Komaleeswaranpet Egmore Thousand Lights Nungambakkam Pudupakkam Pudupakkam Pudupakkam Pudupakkam Ripauk Komaleeswaranpet Egmore Thousand Lights Nungambakkam Thiruvæteswaranpet Tripucane Zam Bazaar Mirsahibpet Royapettah Teynam pet Tripucane Zam Bazaar Mylapore Aynavaram Aynavaram Aynavaram Aynavaram Aynavaram Aynavaram Aynavaram Aynavaram Agwar Sembium Aynavaram Agwar Saidapet Guindy Adyar Extension	
, t t ,	Serial Number	Added ateas or under the property of a section of the poper back and the property of the prope	

	Total Deaths registered during the year	1,132 1,132 1,134 1,294 1,294 1,294 1,294 1,294 1,294 1,107 1,1187 1,1184 1,1184 1,1184 1,1184 1,1184 1,1187 1,118	
	December	116 109 10	
	November	2,200 1033	
	October	2,456 10,00 10	
	September	2, 2, 2, 2, 2, 2, 3, 3, 3, 4, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,	
in 1947	3sugu4	201 101 738 888 899 644 777 775 1119 1117 1119 1117 1119 1117 1119 1117 1119 1117 1119 1117 1119 1117 1119 1117 1119 119 119 119 119 119 119 119 119 119 119 119 119 119 119 119 119 119 119 11	
each month i	]nj\		
	June	28 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
ed during	Лем	25	
registered	lingA	2, 423	
deaths	Матсћ	2, 74, 7, 7, 7, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8,	
Showing	<b>Еергияту</b>	1288 1131 1131 1131 1131 1131 1131 1131	_
Shov	January	25.01 1.00	
		Total	
	Name of Division	New Washermenpet Royapuram Singara Garden Sanjeeviroyanpet Korukupet Harbour Muthialpet Kothawal Bazaar Seven Wells Seven Wells Sowcarpet Peddu Naickenpet Trevellyan Basın Park Town Edapalayam Vyasarpady Perambur Choolai Kosapet Purasawalkam Napier Park Chintadripet Egmore Thousand Lights Nungambakkam Pudupakkam Triplucane Zam Bazaar Mirsahibpet Chepauk Triplucane Zam Bazaar Mirsahibpet Royapettah Teynampet Teynampet Triplucane Zam Bazaar Mirsahibpet Kodambakkam Aninjikarai Kodambakkam Mambalam Saidapet Guindy Adyar Extension	
	Serial Number	Added areas. e w w w w w w w y y y y y y y y y y y y	
	H—11		

HI OF	s in 1947
:	age-group
	egistered in each division according to age-groups in 1947
	division
-	eacn
-	ed in
	register
1	aeatus
•	10Wing
5	2

Number of	males to 100 deaths among females	131.9	109.6	104.7	9 901	7.801	111:0	6.68 7 T T T	105.1	125.7	133.2	9.26	107.1	100 to 50 to	111 3	101.2	107.0	99.2	0.86	116.4	$128\cdot \tilde{5}$	112.7	119 0	128-4	4.96.4	7-00	\$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0	$13\overline{1} \ 6$	113.3	0-801	105.3	1.10.4	105.2	4.66	0 06	99.6	120.3	0.06	8.TTT	103 0	110.9	103 0	78:2 133:3		110 0
ages	Total	596	500	1,132	1,184	1,294	54 TG	2.46	525	316	891	268	909	000	391	1 157	778	1.167	687	952	329	751	403	603	656	400	452	908	868	538	544	1 454	1,101	208	534	411	304	700	519	270	232	209	139		29,979
Total for all ag	Females	257	243	553	200	029	150	13.4	256	140	382	137	490 210	989	1 000	575	376	586	347	077	144	က က က က	184	764 994	534	310	245	348	421	2559	265	715	327	355	281	206	88.	698	240	133	110	299	63		14,279
Tota	Males	339	266	579	611	6/4	211	111	269	176	509	131	316	667	206	582	402	581	340	512	185	808 808	219	0000	322	308	202	458	2.25	279	606	739	344	353	253	205	166	331	418	137	122	308	84 84		15,700
Sixty	years and up wards	122	7.9	64.1	191	181	118	110	97	58	144	89	100	100	233	164	117	184	136	160	55	121	22	105	S 6	20	130	159	178	26	<b>4</b> 6	9 2 3	13.0	126	92	87	53	115	00 F	64	45	113	25 48 44		5,142
Fifty	end under sixty years	33	42	89	25	80 °	27	10	41	22	92	98°	0,	107	2.6	4 rc	000	82	63	73	22	61	35	70	50	23	14		65	88 88	30	1 g	2 10	42.	37	35	20	88	#6°	200	13	40	15		2,187
Forty	and under fifty years	50	3 17	88	93	108		7 -	1 4 62	32	108	27	¥9	120	- F	909	2 20	282	52.0	68	19	89	37	46	တ္က င်	1000	90	22 22	20	35	26	110	7 10	0+	27	30	24	44	44	20		52	96		2,274
Thirty	and under forty years	39	29	<del>*</del>	se e	103		) or	- -	30	102	16	<u> </u>	1.00	0.77	- oc	) <del> </del>	72	55.8	96	97	69	67	47	43	40 140	# 63 + 45	5.	69	97	<del>-1</del> 4 €	901 201	100 26	£ +	328	21	21		හිට ල කිය —	61	11	34	11		2,299
Twenty	and under thirty years	986	) ଶ : ଜୁ	†s	s is	103	25.5	) O	00 cc	27	91	22.5	69	130	76	* 57 57 57 57 57 57 57 57 57 57 57 57 57 5	1 10	000	27	67	333	0†	30.	51	63	0.5	7 6	99	79	51	<u> </u>	0 C	92	ි ග ග	40.	255	18	53	24.2	0 0	15	9#	12		2,274
Fifteen	and under twenty years	00	16	62	30	ee :	iG 1 <u>1</u>	3 6	7 7	14	35	σ ;	36	7 10	1 20	9 50	20	98   8	14	19	6	16	<u>က</u> ့	∞ t	77	T -	101	28.	31	11	<u>:</u> 2 ;		0 - 0 -	19	16	9	<del>-1</del> 1	16		Q 1Q	) kQ	16			796
Ten and	under fifteen years	12	10	11	17	$\frac{21}{1}$	<u>۔</u> م	<b>?</b> ₩	၁ တ	10	17	, 10	# 14 	. To	1 40	<u> 10</u>	20	16	6	16	4	11	<b>:</b> '	L .	01°	ກ 0		10	14	r¢ ·	ۍ ه —	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	67 -	14	7	41	7	ପ ଓ	OO 14	o ro	ī	14	ରେ ସେ	1	499
Five	and under ten years	33	72	27	07	19	<u>م</u> ا	or c	61	15	33.	တင္	× •	10	16.	61	200	31	21	38	14	222	119	15	721	- 6	2 2 -	25.	32	48	ි ස	186	0 6	47	23	11	12	25	22 -	10	15	255	C #		1,182
One and	under five years	112	86	21.53	225	24.2	79	H #0	3 N S	36	116	22 ; 20 ;	153	5 00 5 tr	61	314	170	225	126	171	49	174	62	110	611	130	282	130	146	TF 1	806	105 • 209	707	139	103	80	58	142	96	00 24 25	45	81	10 23 33		5,339
0	Under one year	1++	155	360	362	357	80 y	100	136	22	173	09	212	202	108	311	215	353	160	223	86	176	96	150	141	18.5	112	220	22.0	157	1.4.1	368	151	202	154	107	87	200	69 60	89	69	186	£ £	-	7,087
Ser.	Name of Division								Amman Koil		Seven Wells							Chooial	Kozanat		Kilpauk						Thousand Lights				_	—			_	Mylabore	Advar	Sembium	•	- Aminjikarai	•	Saidapet	Guindy Adyar Extension		Total
ເອຊຸນ	Serial nun		4 33	ಣ		Ü	9 1	- 0	00		11	12	13	<b>—</b>	15	10	10	101	90	9 6	1 21	23	57	25	2.9	22	90 : 54 :6	2 2	31	रा (3	93	33	10 t	300	900	0.00	40		·st	:911	e p	qeq	bΑ		

170	1347
	ක
•	lurin
-	0
•	livision
	0
_	each
	111
	I diseases in each division during
-	_
- 6	trom principal
	₽ P
٠ و	trom
	]S
-	gdeath
•	Showing deaths

Total deaths registered during the year	596 509 1,132 1,132 1,134 1,294 349 578 246 526 391 1,157 778 1,157 778 1,157 665 603 603 603 603 603 603 603 603
All other	244 203 484 484 150 310 1150 1170 1160 1170
Maternal sd:sab	44514801 : 1 : 1 : 1 : 1 : 2 : 2 : 3 : 3 : 3 : 3 : 3 : 3 : 3 : 3
səjīu ţa I	396 396 396 396 396 396 396 396
Other respiratory diseases	121 249 249 397 431 136 160 160 160 160 172 187 187 187 187 187 187 187 187
Tubercle including tubercle of lungs	2000 100 100 100 100 100 100 100
Dysentery and Diatrhoea	104 1884 1188 1140 169 169 169 169 176 188 188 188 198 198 198 198 198
етемет теметя	2012 1110 1171 1168 1171 1168 1171 1168 1171 1100 1100 1100 1100 1101 1100 1101 101 10
sirs(sM	
Enteric	4 41 10 10 10 10 10 10 10 10 10 10 10 10 10
Mezsles	:::::::::::::::::::::::::::::::::::::::
Small pox	
Сројега	
Plague	
Name of Division	New Washermenpet Royapuram Singara Garden Sanjeeviroyanpet Harbour Muthialpet Harbour Muthialpet Rochawal Bazaar Seven Wells Sowcarpet Peddu Naickenpet Tievelyan Basin Park Town Edapalayam Vyasarpady Perambur Choolai Kosapet Pursawalkam Kilpauk Vepery Napier Park Choolai Kosapet Pursawalkam Kilpauk Vepery Nungambakam Thiruvateeswaranpet Egmore Thousand Lights Nungambakam Pudupakkam Thiruvateeswaranpet Theyauk Triplicane Zam Bazaar Mirsahibpet Royapettah Teynampet Theyauk Triplicane Zam Bazaar Mirsahibpet Awinyapore Adyar Sembium Awinayanam Aminjikarai Kodanbakkam Old Mambakkam Old Mambakkam Old Mambakkam Saidapet Guindy Adayar Extension  Rate of deaths per 1,000 estimated
Serial number	us man

STATEMENT No. VI

VITAL STATISTICS

pal communities in 1947 compared with 1946
19
th
WI
eq
ar
m
00.
147
<del></del>
Ξ.
ies
nit
nu
mc
C
ipa
inc
principal
for
es.
eaths and rates for
pq
3 21
ths
lea
le (
nti
nfa
d ii
an
hs
eat
ths, deaths and infantile death
howing births, deaths
bir
ng
Wi
She

		Infantile Death Rate	43.48	92.98	140.34	184.09	211.41	:		183.00
		Infantile Deaths	<b>C</b> 3	49	334	6,374	904	•		7,663
		Death Rate	:	÷	:	ŧ	:	:		31.29
	1946	Deaths	13	241	1,279	22,787	3,048	13		27,381
		Birth Rate	:	:	:	:	:	:		47.85
		Births	46	527	2,380	34,625	4,276	20		41,874
		Infantile Death rate	23.81	108.23	151.57	197·36	218.61	•		195.99
		Infantile Deaths	_	20	313	6,721	902	:		7,987
	1947	Death rate	•	•	:	:	•	•		34.25
		Deaths	15	220	1,397	25,107	3,237	က		29,979
		Birth Bate	•	•	-	:	:	:		46.57
		Births	42	462	2,065	4,054	4,126	. 4	11	40,753
,	QÇ Q	oitsluqo nibrosss ot sususo 1941	K		i serba	sə tot n sM təta slisvs				8,75,184
· ·		Community	Europeans	Anglo-Indians	Indian Christians	Hindus	Muslims	Others		. Total

VITAL STATISTICS

Showing births, deaths and infantile deaths with rates by months in 1947 compared with 1946

				15	1947					1946			
Months		Births	Birth Rate	Deaths	Death Date	Infantile Deaths	Infantile Death Rate	Births	Birth Rate	Deaths	Death Rate	Infan tile Death Deaths Rate	Infantile Death Rate
January	:	2,108	$26 \cdot 1$	2,532	31.4	699	317.4	2,247	28.3	2,135	26.9	553	246.1
February	:	2,889	35.8	2,954	9.98	754	$261 \cdot 0$	2,593	31.6	2,138	26.9	573	221.0
March	:	2,981	37.0	2,741	33.0	620	208.6	2,798	34.2	2,096	26.4	540	193.0
April	:	3,045	37.7	2,423	30.0	616	202.3	3,483	43.7	2,008	25.4	523	150.2
May	:	3,671	45.5	2,331	58 9	609	165.9	3,472	43.7	2,164	27.3	614	176.9
June	:	3,553	44.0	2,196	27.2	989	179.0	2,968	37.4	1,907	24.0	529	171.5
July	:	4,022	49.8	2,485	8.08	772	191.9	3,996	50.3	2,510	31.6	801	200.5
August	:	3,525	43.7	2,611	39.4	823	233.2	3,902	49.1	2,269	28.6	24.9	173.5
September		4,053	2.09	2,574	31.7	646	159.4	4,225	53.2	2,500	31.5	691	163.6
October	:	3,510	43.5	2,456	30.4	652	185.8	3,853	48.5	2,327	29.3	625	162.5
November	i	3,421	42.4	2,206	27.3	539	157.6	3,960	49.8	2,177	27.2	641	161.9
December	;	3,975	49.3	2,470	9.08	652	164.0	4,377	55.1	3,150	99.68	968	204.5
Total	:	40,753	42.08	29,979	30.96	7,987	195.99	41,874	43.91	27,381	28.71	7,663	183.00

APPENDIX

STATEMENT No. VIII

VITAL STATISTICS

Showing percentage of infantile deaths from principal causes in 1947

Desths	oitaA	22.81	14.12	34.71	28.36	100.0
LatoT elituatul	Deaths	3 7855	1,128	2,772	2,265	7 987
	Ratio	16.85 1	12.23 1	29.98	21.32	22.02
anto IIA sesuso	Desths	307 1	138 1	831 2	483 2	1759 2
məqsas	Ratio	3.68	9.13	33.62	44.11	26.31
-sriqsəA	Desths		103	932	000	2,101
məqsas	OiteA	3.68	2.67	7.65	5.34	5.81
Nervous	Deaths	29	64	212	121	464
Debility	Ratio	72.67	63.92	11.51	2.43	30.28
Premature Birth, and	Deaths	1,324	721	319	55	2,419
Beorrasia	Ratio	1.70	6.38	12.69	20.84	11.61
Dysentery	Deaths	31	2	85 25 20	472	927
Fevers	oiteA	1.43	2.66	4.47	5.83	3.91
Офрет.	Deaths	26	30	124	132	312
427 1421 12 <b>TA</b> T	oitsA	:	:	:	:	:
sirala <b>M</b>	Deaths	:	:	:	:	:
Measles	oitsA	:	:	:	•	<u> </u>
	Deaths	:	:	:	•	
xoq-llsm2	oitsA	•	:	0.02	0.13	90.0
1200 110003	Deaths	:	:	 C3	<b>c</b> o	10
ge-periods		seven days	s and e menth	n and x months	s and e year	Total
Age-ne	0	Under seve	Seven days under one	One month under six	Six months under one	

VITAL STATISTICS

o. IX	al ths	Ratio	22.67	37.59	36.19	32.92	28.71	31.62	96.08
ENT No.	Total	Deaths	18,019	30,366	29,705	27,277	27,381	26,550	29,979
STATEMENT	cynges	GiteA	11.47	18.51	18.66	16.77	15.27	16.14	15.66
STA	redto IIA	Deaths	9,113	14,953	15,318	13,987	14,565	13,587	15,169
	Desths	oitsA	7.46	9.32	.83	2.03	9.20		
	Maternal	Deaths	1547	275	178 6.83	155	1493.	1826.45	1593.30
years		oitsA			0.25	0.39	0.31		1
five y	səininI	Deaths	2090.26	276 0.34	202	313(	291	258 0.31	396 0.41
g sno	er ji- ry ses	oiteA	5.15	9.73	8.73	7.21	6.16	7.40	2.03
previous	Other Respiratory diseases	Deaths	4,093	7,857	7,166	600,9	5,878	6,201	6,803
d in the	Tobercle of Lungs	oitsa	0.38	0.48	0.35	0.49	0.42	0.43	0.52
nd in	PloreduT gaibuloai	Deaths	301	398	290	410	405	361	502
1947 an	seodrisiQ	oitsA	2.83	4.36	4.26	3.60	3.16	3.64	3.97
in	Dysentery and	Deaths	2,251	3,521	3,498	3,003	3.010	3.057	3,847
causes	Grava r	OitsA	1.69	2.90	3.27	3.55	<b>%</b>	5.86	2.96
	Other	Desths	1,341	2,345	2,687	2,963	2,746 2	2,416 2	2,862
princi	bionqyT	oitsA	0.16	0.11	80.0	0.11	0 11 (	0.11	0.17
. mo.	biodarT	Deaths	128	06	99	95	107	97	163
Showing deaths from principal	Small-pox Measles Malaria	oitsA	0.03	80.0	0.10	90.0	0.02	90.0	90.0
; dea	s Ma	Deaths	27	5 67	1 82	2 46	45	25	55
wing	asle	oitsA	:	40.005	10.001	0.002	:	11.002	
Sho	Me	Desths	:			<u>~~</u>	:		:
	rod-l	oiteA	0.03	0.016	0.16	0.23	0.18	0.19	0.03
	Smal	Deaths	18	13	128	192	169	104	20
IČS		oitsA	0.11	0.49	0.03	0.07 192	0.601 169	0.14 104	0.002
IST	Ch dera	Deaths	00	400	16	61	<del></del> 1	105	C1
STATISTI	Plague	Ratio	:	10.001 400	:	•	:	:	1 0.001
		Deaths	•		:_	:	:	S (7 7) S	
ŸITAĽ	Year		1942	1943	1944	1945	1946	Mean of the last 5 years	1947

VITAL STATISTICS

deaths, infantile deaths and the principal causes of deaths in 1947 and during previous 10 years Showing births,

All other causas	Kate	19 5	20.2	22.42	17.63	17.53	11 47	18.51	18 66	16.77	15.27	15.66
All othe	Deaths	12,605	13,102	14,511	13,090	13,709	9,113	14,953	15,318	13,987	14,565	15,169
s.	Rate	9 30	9.20	1.74	1-6-7	69.8	7.46	9.32	6.83	5.07	3.56	3.90
Maternal	Deaths	289	284	245	264	285	154	275	178	155	149	159
ies	Pate	:	:	:	0.30	0.30	0.30	0.30	0.30	0.39	0.31	0.41
Injuries	Desths	170	215	254	234	239	209	276	202	313	291	396
pira-	ारु <i>व</i> र्	9.10	8.10	9.36	7.83	8 34	5-15	9.73	8 73	7-21	6.16	7.03
Other respira- tory disasses	Desths	6,676	880'9	7,166	6,016	6,623	4,093	7,857	7,166	6,009	5,878	6,803
ling le of gs	Rate	1 60	1 70	1.83	1,38	0.73	0.38	0.49	0.35	0.49	0.42	0.52
Tuberele including Tuberele of Lungs	Desths	1,155	1,301	1,400	1,064	572	301	398	290	410	405	202
	Staff	2.90	3.10	4 73	136	16.4	2 83	98.7	4 26	3.60	3.16	3.97
Dysantary and Diarrhosa	Desths	2,133	2,308	3,624	3,352	3,838	2,251	3,521	3,498	3,003	3,010	3,847
	Rate	2.80	2-90	2 75	5.49	2.94	1.69	2.90	3.27	3.55	2.88	2.96
Other fevers	Deuths	2,036	2,183	2,108	1,918	2,302	1,341	2,345	2,687	2,963	2,746	2,862
Typhoid	Rate	0.13	0.16	0.23	0.16	0.26	0.16	0.11	80.0	0.11	0.11	0.17
Typ	Densha	96	119	187	125	206	128	06	99	95	107	163
Malaria	Rafe	0.11	20.0	90.0	0.04	0.0	0.03	80.0	0.10	90 0	0.05	90.0
	Desishs	01 78	11 50	133	03 29	01 30		05   67	01 82	02 46	15	55
Measles	Desths	8 0.01	8 0.01	-	2 0-003	1 0.001	:	4 0.005	1 0.001	2 0.002	:	
	Rate	0.27	0.40	0.35	F0.0	900-0	0.05	0.016	0.16	0.23	0.12	0.03
Smell-pox	Desities	196	5 561	3 268	31	3.0	18	13	128	192	177	20
Cholera	०५%ह्य	0.32	0.05	0-003	:	:	0.11	0 49	0 02	20 0	0.001	0.003
	Desths	232	36	รา	;	:	06	01 +00	16	<u> </u>		1 2
Plague	Refe	:	:	: -:-	:	:	:	1 0.001		•	:	1 0.001
Infeatile   Infeatile   deaths under   one year.	Rale	8.022	222.1	241.62	205-70	208-94	196.76	08-175	284.27	213.82	183.00	195-99
Inferience in section in the section is a section in the section i	Destlis	988'9	6,881	7,651	6,837	6,847	4,062	7,295	7,407	6,532	7,663	7,987
	Still Births	1,400	1;321	1,402	1,403	1,237	8+0	1,071	1,062	1,107	1,505	1,408
hs	Death Raic	34.0	35 0	38.92	33.98	35.44	22.67	37.59	36.19	32.71	28.71	30.96
Deaths	No. regissered cachding Still bitchs	12.10 25,674	41.30 26,282	41.34 29,808	43.23 26,125	41 91 27,710	25.97 18,019	36.51 30,366	31.74 29,705	36 63 27,277	13.91 27,381	42.08 29,979
œ	Birth Rase	42.10	11.30	41.34	43.23	41.91	25.97	36.51	31.74	36 63	43.91	42.08
Births	No. of live Births registered	30,958	30,985	31,665	33,238	32,770	20,644	861,62	26,056	30,549	41,874	40,753
	Year	1937	1038	1939	0461	1941	1942	8+61	1944	1945	1946	1947

.

VACCINATION

Showing vaccinations performed during each month in 1947

STATEMENT No. I

		Un- known	3,144	4,68	3,004	2,612	2,372	2,364	2,124	2,370	1,904	1,680	2,005	31,998
	Results	Un success- ful	9,900	11,826	8,116	6,914	6,511	8,050	6,035	5,719	4,804	5,620	5,867	90,703
Re-Vaccinations		Success-	456	794	416	305	328	400	406	305	249	284	463	4,981
Re-Vac	sons	Total	13,500	17,303	11,536	9,831	9,211	10,814	8,565	8,391	6,957	7,584	8,335	1,27,682
	Number of persons Re-vaccinated	Females	5,950	8,184	5,831	4,292	4,368	5,241	4,010	4,067	.3,211	3,280	3,874	59,467
	Numl Re	Males	7,550	9,119	5,705	5,539	4,843	5,573	4,555	4,324	3,746	4,004	4,461	68,215
		Un- known	E 1	13	12	9	6	က	9	က	_	_	П	88
ns	Results	Un- success- ful	<u> </u>	o —		:	9		-	:	:	:	:	14
accinatic		Success- ful	2,924	3,335	3,038	3,027	3,279	3,349	3,023	3,108	2,894	2,967	3,318	37,371
Primary Vaccinations	sons	Total	2,938	3,349	3,051	3,033	3,294	3,353	. 3,030	3,111	2,895	2,968	3,319	37,468
J	Number of persons Vaccinated	Females	1,434	1,594	1,481	1,463	1,582	1,655	1,495	1,535	1,431	1,453	1,580	18,311
	Num	Males	1,504	1,519 $1,755$	1,570	1,570	1,712	1,698	1,535	1,576	1,464	1,515	1,739	19,157
	ıth		:		•	•	•	:	•	•	•	•	•	Total
H1	Month		January	repruary March	April	Mav	June	July	August	September	October	November	December	

	e. Liu	io 7n	noit	8 4 7 0 8 8 8 8 1 4 4 4 8 4 8 4 8 8 8 8 8 8 4 1 1 4 8 8 8 8
No	Fercentage f successfu cases in	which the results ere known	Revaccina-	
ENT	Pe of s	WCJ	Primary	
ATEMENT		Result	, Опклоwn	11. 12. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ST	uc	Re	Successful	221122 281122 281122 281122 281122 281122 281222 281222 38122 38122 38132 38133 3
1	Re-vaccination		[efoT	E. J. E. J. A. J. G. E.
g 194	Re-1	Total	Females	1, 509 1, 509
during			Males	88 49 49 49 49 49 49 49 49 49 49
division			Unknowa	:::::::::::::::::::::::::::::::::::::::
ach div		iu1	lntoT	### ### ### ### ### ### ### ### ### ##
in ea	ion	Successful	6 years	102 102 102 103 126 127 111 111 111 121 133 133 134 144 144 145 145 145 145 145 145 145 14
rmed	accinatio	S	one reav and a randu sreav	25 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
erfor	Primary V		Under one year of age	27
vaccinations perfor	Prin		IsloT	1, 164 1, 164 1, 164 1, 221 1, 221 1, 221 1, 221 1, 065 1, 025 1,
inat		Total	Females	243 330 563 727 565 727 727 727 727 728 335 835 835 841 841 844 841 830 830 832 832 832 832 832 833 833 833 833 833
			Males	253 391 601 190 190 190 190 190 190 190 1
ars of	ersons	res:	LatoT	8, 9, 4, 8, 9, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
ticul	Total No. of persons	Vaccinated	Females	1, 256 1, 256 1, 256 1, 937 1, 105 1,
Showing particulars	Total N	V2	Males	1, 899 1, 899 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
owin				
S		9		Total
		Division		e t t Çoil
NOL		Name of		Washermenpet puram ura Garden viroyanpet kupet our idalpet aleeswarar Koil ken Koll awal Bazaar n Wells arpet u Naickenpet elyan Basin Town alayam arpet sarpet sarpet sarpet sarpet sarpet sawalkam sarpet s
CCINATION		2		New Washermenpet Royapuram Singara Garden Sanjiviroyanpet Korukupet Harbour Muthialpet Kachaleeswarar Koil Kachaleeswarar Koil Kachaleeswarar Koil Kothawal Bazaar Seven Wells Sowcarpet Peddu Naickenpet Trevelyan Basin Park Town Edapalayam Vyasarpady Perambur Choolai Kosapet Perambur Choolai Kosapet Rosapet Komeleeswaranpet Egmore Thousand Lights Nungambakam Pudupakkam Tiruvateeswaranpet Egmore Thousand Lights Nungambakam Pudupakkam Tiruvateeswaranpet Chepeuk Triplicane Zam Bazear Mirsahibpet Royapettah Teynampet Triplicane Zam Bazear Mylapore Adyar Sembium Aynavaram Aynavaram Aynavaram Aynavaram Saidapet Guindy Adyar Extension
VAC		uo is	Divid	Added aleas. Added aleas. Added aleas. Added aleas. Added aleas. Added aleas.

APPENDIX

## MEDICAL RELIEF

# STATEMENT No I

Serial No.	Name of Dispensary	Year in which Dispen- sary	New Cases	Total N Cases to		No. of tio perfo	ns	Remarks.
<b>0</b> 2.		was opened		1947	1946	1947	1946	
1	Royapuram Dispensary	1924	25143	£5943	69838	728	535	
$\frac{1}{2}$	Washermanpet ,,	1913	49597				423	
3	Vyasarpady ,,	1929	35419				528	Leprosy cli-
4	Sembium ,,	1946	54252			1330	720	nic attached
5	Perambur ,,	1928	34413	65990	77028	380	118	3
6	Mint "	1923	44892	92197	96880	397	436	
7	Harbour "	1929	30851	69924	73021	215	210	
8	Mafuskhan ,,	1923	30918	64503	66787	251	103	t .
9	Trevelyn Basin ,,	1919	31248	1			49	
10	Baliah Naidu ,,	1899	36947				308	
11	Kilpauk ,,	1919	30970				235	
12	Kosapet ,,	1929	27600	1		l .	599	
13	Chintadripet ,,	1909	34670			1	34	Lady M. o.
14	Egmore ,,	1923	15386				$\frac{13}{2}$	
15	Nungambakkam ,,	1923	29437				131	t .
16	Pudupakkam ,,	1924	24338	1			176	1
17	Triplicane ,,	1918	37145		75025		160	
18	Teynampet ,,	1927	25659		51662		217	
19	Krishnampet ,,	1938	20870				59	
20	Mylapore ,,	1924	36780		82289			Lady M. o.
21	Thyagarayanagar ,,	1922	37250	75865	58764	287	244	Lady M. o. Shifted from
2 <b>2</b>	Thousand Lights							Pulianthope
	Ayurvedic "	1930	32269	63322	60400	384	491	Lady M. o.
23	Mannadi Unani ,,	1938	19622	48038	65709	27	28	
$\frac{23}{24}$	Pulianthope ,, ,,	1930	24401				1	Shifted from
21	1 dilaitinopo ,,							Thyagaraya nagar
25	Pudupet ,, ,,	1939	20109	50820	70458	148	294	
26	Tiruvateeswaranpet		0.05.00	0000		•	100	
	Unani "	1932	36785	82981	72521	324	122	
27	Koyapuram							
	Siddha "	1945	28110		59756	13	S	
28	Choolai ,, ,,	1931	49531		106751	67	42	
29	Otteri ", ",	1938	35708	76118	52432	100	113	
								•
				J				

STATEMENT No. II

MEDICAL RELIEF

Showing out-turn of work done in the Skin and Leprosy Clinics for the year 1947

	Average monthly	atten- dance	3,596	510	11,759	15,865
Yearly total	Nat Z	Skin & Leprosy cases	43,157	6,116	1,41,113	1,90,386
iseases	Number of	injections performed	1,813	:	:	1,813
Skin Diseases	Num ne' dis		13,973	1,792	66,460	82,225
	Number of	injections performed	4,543	3,105	:	7,648
		No. Other- wise	46	73	ಣ	122
Ŕ	tment	No. arrested	9	6	•	15
rosy Wor	Results of Treatment	No. Symp- tom free arrested	10	62	•	13
Details of Anti-Leprosy Work	.Result	No. Impro-	72	48	•	120
Details of		No. cured	:	:	:	
	bes	Non- Infec- tive	92	107	ಣ	202
	Types	Infec- tive	42	25	•	67
	New	Leprosy Cases	134	132	ಣ	269
	Date of	Opening.	2-2-1934	4-8-1931	•	•
	Name of Institution		Jee House Road Skin and Leprosy Clinic	Vyasarpady Leprosy Clinic	Other General Dispensaries	Total

Showing number of cases admitted, died and discharged in the Infectious Diseases Hospital in 1947

MEDICAL RELIEF

STATEMENT No. III

Total.	39	1406	78	1523	1385	96	%1.9	42
Contacts.	70	243	:	248	245	:	:	က
Other diseases.	C)	26	4	62	44	17	27%	
Secondary Syphilis.	-	0	:	10	10	•	:	
sdunjų		15	ಣ	19	19	•	•	•
Whooping Cough	:	9	•	9	9	•	:	
Diphtheria.	<b>—</b>	16	-	18	17	-	%9	
Pneumonia.	:	∞ ·	:	. ∞	9	6.1	20.%25.%	•
T. B. Meningitis.	:	9	6.1	<b>∞</b>	4	4	%.09	
Pneumococeal Meningitis.	÷	rð.	:	7.0	-	4	%08	• 11
C. S. Meningitis.	:		:	17	14	ಣ	9.21	
Plague.	•	:	ක	က	61	<del></del>	33.3%	
Measles.	61	96	2	105	101	:	:	4
Сһіскеп рох.	12	366	16	394	369	:	•	25
Small-pox.		125	, tů	141	122	17	12.1	6.7
Acute G. E. dy-sentery & chronic enteritis.	4	409	36	449	397	45	%01	1
Cholera	:	29	_	30	28	Ø	9.9	
	Patients in the Hospital on 31st December 1946	Patients admitted $\begin{vmatrix} 1-1-1947 \\ to \end{vmatrix}$ City	31-12-1947 Mofussil	Total No. of patients treated during the year	Total number discharged	Total number dicd	Mortality rate	Patients in the Hospital on 31st December, 1947

H—14

I.	Кетаткs		Rems	
oN IN		Total of ntrants & regulars	Percentage	11.85 1.15 6.27 6.27 6.24 0.09 0.09 0.09 0.19 0.19 1.10 0.05 1.84 1.84
EMED		Total centrants regular	No. Defective	1550 1550 8841 293 103 103 1044 1062 1062 1062 1062 1062 1062 1062 1062
STATEMENT		70	47	13.26 0.67 6.95 10.42 1.21 0.03 0.03 0.78 0.78 0.78 0.78 1.48 0.05 1.48
	ls	Regulars	Percentage 947–48 1946-	12.41 0.85 6.72 8.19 2.54 0.01 1.11 1.19 0.05 0.05 0.05 0.05 0.10
	Girls		No. Defective	973 672 642 199 199  66 691 153
		S	147	8.76 1.29 5.31 5.32 0.05 0.70 0.32 0.75 0.75 0.05 0.05 0.05
		Entrants	Percentage 947–48 1946-	11.02 1.60 3.80 1.80 0.02 0.08 0.08 0.08 0.09 0.09 1.66 0.06
			No. Dafective	298 298 199 199 199 109 109 109 109 109 109 109
		l of tts & lars		17.22 6.12 11.92 11.92 0.03 0.07 0.03 0.03 0.03 0.03 0.03 0.03
1947–48		Total o entrants regulars	No. Defective Percentage	3822 1359 1454 1454 150 150 150 150 150 150 150 150 150 150
194		gulars		16.92 14.14 6.91 2.81 0.45 0.01 0.02 0.02 0.08 0.08 0.08 0.08 0.08 0.08
	ys		Percentage	16.30 10.82 10.82 10.82 0.01 0.01 0.05 0.04 0.03 0.03 0.03 0.03 0.03 0.03 0.03
	Boys		No. Defective	2045 6466 1358 717 293 26 76 394 44 813 813 18
				23.41 9.61 13.89 8.05 0.25 0.01 0.13 0.13 0.13 0.13 0.13 0.13
		Entrants	Percentage	18.41 13.34 13.34 13.34 13.34 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0
			No. Defective	1777 7128 7128 7223 737 740 750 750 750 750 750 750 750 750 750 75
MEDICAL INSPECTION	Defects			Malnutrition Dirty head, body and nails Teeth and mouth Nose and throat Eye diseases Vision Ear diseases Vision Circulatory system Circulatory system Tuberculos:s Respiratory system Abdominal organs Bones and joints Infectious & contagious diseases Other diseases and defects Vaccination Deformities
M		Z		10004700 00 11 12 12 12 12 12 12 12 12 12 12 12 12

## APPENDIX TO STATEMENT No. I

	Group	No.	on Roll	da	rage cily dance		No. examined		No. defective		centage	
	•		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boy	rs Girls
	gulars	}	2635	16372	21665	12576	9 <b>65</b> 3			1613 3091	44· 5	
	Total .		2635		2 21665 12576		22200	13076	8944	4704	40.5	29 35 · 97
MEDI	ICAL I	NSP	ECTI	ON	Tre	atment	Table		SI	CATEN	ŒNI	No. II
No. treated at			No. sent to Corporation dispensaries	No. referred to Govornment Hospitals No. referred to Govt. Ophthalmic					No. of revisits	pard to scribors	No. of re-examinations of children	
Boys		75	665	707	1359	7	4	6	2350	36	4	6435
Girls		35	78	414	218	1	1	•••	1042	16	1.	6365
Total	L	1.1.1	43	1121	1577	8	35	6	3392	52.	5	2800
MEDI	CAL II	NSPI	ECTÍC	)N H	Height :	and We	eight T	ables	ST	ATEM	ENT	No. III
Age	ŀ	neight			erage eight oounds		Quinqu verage in in	height	aver	nqueni age we pound	eight	Remarks
	Boys		$\operatorname{Girls}$	Boys	Gir	ls E	Boys	Girls	Boys	s G	irls	
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		33·62 35·41 38·92 40·59 42·52 44·27 46·09 48·67 50·80 52·67 55·26 56·42 58·78 56·24 51·00 50·00 	27·50 28·10 30·43 32·48 37·27 40·30 43·65 47·05 50·08 52·72 54·46 59·36 69·99 65·28 75·29 93·50 93·00 101·00 84·00	22.5 23.5 30.2 32.4 34.6 36.7 39.8 48.2 52.9 59.8 62.4 73.7 87.4 85.6 84.7 	57 20 46 41 51 42 42 39 40 56 48 51 51 55 55	0.63 1.32 2.89 4.80 3.83 3.64 9.96 1.62 3.08 4.52 5.58	38·51 40·87 42·52 44·87 47·26 49·19 51·21 52·92 55·01 56·74 58·64 	31·83 33·40 36·24 38·75 42·61 45·90 49·38 53·06 56·22 60·40 61·76	28 31 33 36 40 44 50 54 59 66		

STATEMENT No. I

															1
Remarks.															
Rem															
						-									_
No. of Man—holes.	45	9	11	24	65	67	16	ಣ	∞	<b>C1</b>	14	93	16	156	401
	ţ.		• 6	35		- 33	•	- 66	••		66	•	•	6	ft
Total length sewers laid.	4346	024	3060	2063	6493	949	1326	554	1273	200	1750	5090	2195	26011	55474
	7		<u>್</u>										<u></u>	- 26	
21" C. I. P. Sewer.	:	:	:	407 ft	:	:	:	:	:	:	:	:	•	:	407 ft
Ib" C. I. P.	:	•	653 ft	386 ft	:	÷	:	:	÷	:	:	:	:	:	1039 ft
12" C. I. P.	•	•	•	•	•	:	•	•	•	•	:	470ft	•	:	470 ft
9" C. I. P.	:	•	•	:	•	:	:	:	:	;	:	:	:	2447 ft	ft 2447 ft
15" S. W. i.	:	:	422 ft	*	:	÷	:	÷	i	:	•	;	:	:	422 ft
12" S. W. P. Sewer.	:	:	1985 ft	1270 ft	:	:	•	554 ft	:	:	:	÷	:	:	3809 ft
9" S. W. P.	1971 ft	:	•	:	1273 "	343 "		•	973 "		355 ,,	,, 1360 ,,	,, 1062 ,,	,,16677,,	24014,
6" S. W. P. Sewer.	2375 ft 1971	770 ,,	:	•	5220 ,,	:	1326 "	:	300 ,,	200 ,,	1395 "	3260 "	1133 "	" 2889	22866,,24014,,3809 ft
		•	•		*	:	:	:	:	:	:	:	:	:	
	38	•	66	•	23	66	\$		33	•	•	•	33	66	
Φ	area	•		•		*		•	•		77				
Piace	42	m		ly .	kam			ai.	Road	rk	Ice House Road	lylapore	South Mylapore	Thyagaraya Nagar	
	iarpe	Royapuram	nbur	Vyasarpady	Purasawalkam	'uk	)et	Aminjikarai	ms Ro	Napier Park	esno	My	n Myl	garay	
	Tondiarpet	Roya	Perambur	Vyas	Pura	Kilpauk	Chetpet	Amin	Graems	Napi	Ice H	North M	Sout	Thya	
oN lairoS	F-1	<b>c</b> 3	 	4	*O	9	1.	∞ò	6	1.0	11	12	13	14	
M L															

Length of sawers laid during the year 1947 — 55,474 ft, or 10.51 miles.

## STATEMENT No. II

Showing disposal of applications for licences in 1947

Serial No.	Description of Trade	No. of cases dealt with.	No. sanctioned.	No. refused.	No. pending.	Remarks.	:
1	Aerated water and Ice Factory	38	34	4			
$\stackrel{\cdot}{2}$	Bakery, Sweetmeat Stall and Coffee		94	4	• • •		
	Hotel	1602	1581	21			
.3	Candles and Soap	40	39	1			
4	Cocoanut Fibre, Hemp & Jute	30	28	2			
5	Cattle-yards	1906	1680	186	40		
6	Bones, Hoofs, Hair and Wool	51	4.8	2	1		
7	Cart and Cycle stands	32.	32				
8	Dairy Produce	503	492	$\frac{1}{2}$	10		
9	Flour Gilding and Condiments	166	164	2 2 • <b>2</b>			
$\begin{array}{c} 10 \\ 11 \end{array}$	Gilding and Condiments Hack stables	$\begin{bmatrix} 72 \\ 30 \end{bmatrix}$	$\begin{array}{c} 70 \\ 28 \end{array}$	* 0	•••		
$\frac{11}{12}$	Dyeing	123	123	4	•••		
13	Onions and Garlie	232	278	4			
14	Oil and Oil Mills	760	746	14			
15	Lodging Houses	97	97				
16	Markets	43	38	2	3		
17	Meat	201	181	<b>2</b> 0			
18	Spirits, Turpentine, Chemicals and						
	Rosin	762	751	11			
19	Laundries	505	497	8			
<b>2</b> 0	Fish and Fins	90	82	8			
21	Skin, Hides and Leather	553	524	29	•••		
22	Paddy Boiling	10	9	1	• • • •		
23	Sugar				•••		
24	Catgut, Offal and Tallow	15	14	1	• • •		
25	Snuff	303	280	28	• • •		
26	Cotton	190 3103	$\begin{array}{ c c }\hline 178 \\ 2996 \\ \end{array}$	$\begin{array}{c c} 12 \\ 112 \end{array}$	•••		
27	Eating Houses	9103	2990		•••		
-28 -29	Swine Lime kilns	70	68	2			
30	Beedy Manufacturing	705	654	51			
31	Manufacturing Cigars and Cigarettes						
01.	or Storing Tobacco	695	689	6			
32	Camphor Storing and Boiling	61	60	1			
33	Shaving Saloon	2115	2101	14			
34	Husking of Paddy	45	45	•••			
35	Groundnut Storage	440	440				
36	Grain Storage	901	891	10	•••		
37	Gold Refining	6	6	•••			
<b>3</b> 8	Poultry	23	23	•••			
	Total	16573	15967	552	54		
	Total	10373	10001	002			
	H_15			****	es.		- A

H-15

STATEMENT No. I

LYSTS	Ì
A	1
ANA	-
TER	1
1	į

1947
in
samples
water
of
Examination

Remarks								
Number of samples examined	1,145	311	33	42	87	14,600	.3,780	19,945
Description	Complete bacteriological and chemical examination	Partial bacteriological and chemical examination	Microscopical examination of water from different places in the water supply system	Identification of algae	Culture media, etc., for determination and adjustment of PH	Samples of water tested for the presence of free chlorine, interfering substances, etc.	Examination for the presence of H $_{\frac{7}{2}}$ S in filtered water samples	
Number	<b>.</b>	<b>C</b> 1	က	4	ũ	9	2	

							APF	ENI	)[X								99
STATEMENT No. II	Average No. of beds	per day	The pain and the paint of the p	10	10	11	11	10	10	11	11	10	10	111	111	10	
ATE			D.	0	9	9	9	9	0	0	9	0	9	0	0	ිග .	
ST	ine of		æ	15	ũ	$\infty$	6	5	14	5	67	ű	14	10	9		
	Total cost of		Rs.	4204	4185	4737	5301	6161	6129	6316	6312	6074	6297	6039	9619	5663	
	Cost of chlorine	per lb	Rs. a. p.	9-6-0		66	66	66	66	6	6	33		6	66		fţ
-	Lbs. of liquid chlorine	per month		7082.00	7049.00	7979.00	8929.00	10377.00	10324.00	10638.00	10631.00	10230.00	10607.00	10172.00	10436.00	9538.00	in the shaft
for 1947	orine m.	Mean		1.09	1.05	1.03	1.03	1.02	1.12	1.08	1.06	1.09	1.10	1.11	1.10	1.07	" valve in
data f	of chl p. p.	Min.		1.03	1.01	66.0	1.00	1.00	1.03	1.03	06.0	1.02	1.04	1.06	1.07	1.01	n of 36
Chlorination	Dose in	Max.		1.21	1.09	1.08	1.09	1.15	1.19	1.12	1.13	1.15	1.14	1.15	1.16	1.14	ak dow
Chlori	water illion day	Mean		24.07	23.87	24.87	25.35	24.53	24.20	25.03	25.26	24.56	24.41	23.96	23.72	24.49	* Due to break down of 36"
	Quantity of water iltered in million gallons per day	Min.		23.00	23.66	24.00	24.56	15.00	22.66	24.00	24.00	23.16	23.32	23.16	22.32	22.74	* Due
		Max.		99-97	24.66	25.66	25.66	25 66	28.66	25.82	27.00	25.66	25.82	25.00	25.32	25.97	
	No. of sam- ples of water tested for free chlorine	and for interfering substances		1240	1120	1240	1200	1240	1200	1240	1240	1200	1240	1200	1240	1217	
WATER ANALYSIS	Month			January	February	March	April	May	$_{ m June}$	July	August	September	October	November	December	Average	

### WATER ANALYSIS

### STATEMENT No. III

Showing average lake level and oxidisable organic matter (Tidy's figure) for raw water from the Kilpauk end of the conduit

Mont	h	Average Lake Level ·(in feet)	Oxidisable organic matter (Tidy's figure) for the raw water collected at Kilpauk end of the conduit						
January	47	45.70	0 119 part per 100,000						
February	**	45.60	0.122 ,,						
March	,,	44.50	0 · 143 ,,						
April	,,	42.80	0.162						
May	"	41.20	0.162						
June	,,	40.70	0.142 ,,						
July	,,	39.00	0.120 ,,						
August	,,	37.80	0.177 ,,						
September	,,	36.90	0.188						
October	, ,	41.40	0.192 ,,						
November	,,	41:30	0.183 ,,						
December	,,	40.80	0.178						

LYSIS
52
K
AN
4
K
TE
A
5

STATEMENT No. V

WATER ANALYSIS

Showing results of chemical analysis of Red Hills Lake water

100,000)
per
parts
in
expressed
ext
Results (
K

1	muisəngsM	:	:	:	:	:	8 0.37	0.51	:	•	0.5	•	:
	Calcium	:	:	:	:	:	0.38	:	:	:	0.5	:	:
	Sulphate	:	5.0	:	:	:	1.7	2.01	:	:	1.8	1.9	:
	Chloride	:	5.3	:	:	:	9.8	4.0	•	4.3	3.7	4.1	:
Ydinil	Total Alka	:	5.64		:	:	10.10	10.42	•	9.5	8.92	9.26	
inity	Methyl Orange	:	5.64	:	:	:	10.10	10.42	:	9.5	8.92	9.56	:
Alkalinity to	-qlonən4 niəlaht	:	Nil	:	:	•	0.22	89.0	:	0.44	0.32	Nil	:
ssəu	DraH LatoT	:	0.9	:	:	:	10	8.5	:	6.5	0.2	9.5	:
ness	Permanent	:	4.0	:	:	:	3.5	0.9	:	4.0	3.0	1.5	:
Hardness	Тетрогагу	:	1.0	:	:	:	6.5	2.5	:	2.5	4.0	0.0	:
	spilos latoT	:	12.0	:	:	:	22.2	22.0	:	25.0	22.0	23.0	÷
Эхуgеп	) bəyləssi(I	:	5.81 cc	per mere	:	:	12.95 cc		per mere		per litre	per litre 11.3 cc	per litre
	Nitrite	:	Nil	:	:	:	Nil	Nil	:	Nil	Nil	Nil	:
NAME OF THE PARTY	Mitrate	:	Nil	:	•	:	Nil	Nil	:	Nil	Nil	Nil	:
xygen	O bedroedA	:	0.127	:	*	:	0.140	0.179	:	0.196	0.218	0.176	:
	AlbumimudIA negortiN		0.027	:	:	:	0.027	0.036	:	0.018	0.040	0.046	:
I	Ammoniaea Nitrogen	•	0.001	:	:	:	Trace	Trace	:	0.018	Trace	Trace	:
	Smell	:	Niil	:	:	:	Nii	Nil	:	Nil	Nil	Nil	:
ples	msS to .oV	:	ಸಾ	:	:	:	70	٠ <u>٠</u>	:	70	ŭ	70	:
	Month	January	February	March	April	May	June	July	August	September	October	November	December

			1·0+ .0.0	Nil	Niil	Nil	Nii	Nil	Nil	N. I.	Z	Nil	Nil	Nil	Nil	
No. VI		d	) + 1.0 c.c.	Nil	Nii.	Nil	Nii	Nil	Nii	Zi.Z	Nil Nil	l Nii	l Nii	Z	Nil	
	P. S.	ters in	0+5.0	I.N.	I Nil	Nill	Z	I.S.	I N	lin	I Nii	I Nil	I Nil	l Nil	Nii.	
ME	K.	fermenters	+ 10 c.c.	N.	Z	Nil	Nil	Nil	Z	Nil	lin	Nii	Nil	Niil	Nil	
STATEMENT	-Tap,		+ 20 c.c.	Nil	Nil	Nii	Nil	Nil	Nil	Nil	2.0%	Nil	Nil	Nil	Nil	
$\infty$	Test-	Lactose	+ 60 c.c.	Nil	Nil	Nil	9.1%	8.0%	Nil	Nil	Nil	4.1%	Nil	Nil	10%	
			- 60 c.c.	100%	100%	%001	%6.05	95%	%001	100%	95%	95.3%	100%	%001	%06	
		səldmı	ss to .oV	32	87	30	22	1 25	22	25	[2]	23	20	22	1 25	
			$ \begin{array}{c c}                                    $	1 Nil	l Nil	l Nil	l Nil	l Nil	l Nil	II Nil	II Nii	II NiI	II Nii	II Nil	l Nil	
	water	s in	6 + 1.0 c. c.c.	- 	ii   Nii	ii Nii	ii Nii	ii Nii	il Nil	ii Nii	ii Nii	ii Nii	ii Nii	ii   Nii	ii Nii	
stom	Í	enters	+ 5	Nil Nil	Nil Nil	Nil Nil	Nii Nii	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	Nil Nil	
ly sys	filtered	fermente	20 + 10 .c. c.c.	Nii N	Nil	Nil	Nil	Nil	Nil	Nill	Nil	Nii	Nil	Nil	Niil	
ddns 1	nated	Lactose	60 +	2.0%	Nill	Nii	5.0%	Nil	Nil	Niil	Niil	Nii	Nil 1	Nil	Nil	
wate.	Chlorinated	La			100%	100%	95% 5	100%	100%	7000	100%	100%	100%	1((%)	301	
City		səldur	G. 1	20 95 . 5%	20 10	25 10	0 31_	25  $10$	01 55	25 10	20 10	21 10	20 10	22 10	25 10	
ladras		solume	1 · 0 +   .o.9   No. of Sa	•	-		Nil	Nil	Nil	Nil	I Z	Nil	Nil	Nil	Z	
the M	bration		+ 1 · 0   c.c.	:	:	•	Nil	Nil	Nil	Nil	Nil	19.0%	2.0%	Nil	16%	
ults of	(prior to filtration)	s in	+ 5 c.c.	•	•	•	%e.8	80.03	13.6%	Nil	12.0%	33.4%	40.0%	18.6%	%02	
iological results of the Madras City water supply system		fermenters in	+ 10 + c.c.	:	:	:	20.0%	28.0% 2	1 %0.03	%0.8	30.0%	42.8% 3	50.0% 4	50·C% 1	%0.03	
iologic	water	se feri	staanakuuninnahannahin militaanihin e. s. s.	•	:	* A &			03 %3	8 %0	08 %0	8% 42	Nil   50	20 %9.	Nil 20	
acteri		Lactose	+ 20 c.c.			•	liN %	%87 %(	13.	.00) %	722.	4.		27_		
ant b	ated		+ 60 c.c.	•	:	:	41.7%	20.0%	9.2%	12.0%	%3.01%33	Z.	Z	2.0%	Nil	
Showing important bacter	Chlorinated Raw		- 60	•	•		Niil	4.C%	13.6%	20%]	37	Nil	%).ç	Nil	Nii	
ring i		səldm	0.0. S to .0N		:: ::	:	Nil 12	Nil 25	Nil 22	Nil 25	Nil 20	Nil 21	Ni1 20	Nil 22	Nil 25	
Shov			1.0+	C% Nil	0% Nil	0% Nil		48.C% N	13.6% N	Z0.03	25.C% N	I %3.03	25.C% I	10.0%	10.0%	
	Conduit	in	+ 1.0 e.c.	% 40·C%	45.0%	%0.89 %	%0.69									
		nters	c.c.	%0.09	£5.0%	32.0%	35.6%	25.0%	86.4%	%3.03	75.0%	20.03	%0.02	%0.03	%0.04	
	of the	Lactose fermenters	+ 10 c.c.	Nil	Nii	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2.0%	%0.02	%0.07	
	end	ctose	2000	N III	Nil	Nil	Nil	Nil	Nil	Nij	Zi	Nil	Nil	Nil	Nil	
SIS	Kilpauk	La	60	Nil	Nil	Nil	Niil	Nil	Nil	Nil	Nil	Nil	N	Nil	Nil	
ALY			- 60 + c.c. c	Nil	Nil	Nil	Nil	Nii	Kil	Nil	Nii	Nil	Nil	Nii	Nil	
WATER ANALYSIS	Raw water,	səldm		20	20	25	20	25	22	<u>C1</u>	20	22	20	22	25	-
TEF	Raw		nth	, X	ary						42	nber	ı	pher	ber	
W			Month	January	February	March	April	May	June	July	August	September	October	November	December	
		1	H-16		1	A	₩.	A	f	James .	A	Ø	Q	4		

STATEMENT No. VII

WATER ANALYSIS Showing important chem

Showing important chemical results of the Madras City Water supply system (Results expressed in parts per 100,000)

	Nitrous Nitrogen	Nii	Z	Nil	Nil	Nil	Nil	Z	Z	Nil	Nil	N	Nil	
N.	Nitric megortiN	Trace	Trace	Trace	Trace	Trace	Trace	Trace	Trace	Nil	Niil	Trace	Trace	
K. P	Absorbed Oxygen	0.071	0.083	0.095	0.103	0.088	0.091	660.0	0.141	0.133	0.138	0.140	0.134	-
Test-Tap:	bionimudIA negortiN	0.012	0.016	0.050	0.018	0.050	0.018	0.022	0.025	0.017	0.024	0.037	0 · 032	
Tes	Ammoniacal negorative	0.003	Nil	0.003	Nil	0.003	Nil	Trace	0.002	Nil	Nil	Nii	Nil	
	Smell	l Nil	l Nil	i Nil	0 Nil	6 Nil	2 Nil	5 Nil	liNil	Niil	Nil	Nil	N:11	
	Nitrogen Samples No. of Samples	il 21	<u>c1</u>	<u>C1</u>	<u> </u>	<u> </u>	<u>c1</u>	<u>C3</u>	11 21	1 23	070	1 21	1 20	
	SuortiV	e Nil	Z	e Nil	- Nil	e Nil	- Nil	Nil	Nil	Nil	Nil	N. I.	N. I.	
l Water	Nitric negoratin	8 Trace	4 Nil	5 Trace	$\left  \text{Trace} \right $	l Trace	Trace	Trace	Nil	Niil	Nil	Trace	Trace	
Filtered	Absorbed negyz0	0.02	0.084	60.0	0.102	0.094	0.091	0.101	0.136	0.141	0.136	0.136	0 · 132	
ated F	bion mudlA negortiN	0.012	0.018	0.050	0.024	0.019	0.019	0.024	0.025	0.018	0.027	0.041	0.037	
Chlorinated	Ammoniaeal Nitrogen	0.003	Nil	0.003	Nil	0.005	Trace	0.003	0.003	N.	Nil	Trace	Trace	
	Smell	Nil	Nil	Nil	Niil	Niil	Nil	Nii	Nil	N.	Nil	Nil	Nil	
	No. of Samples	19	20	25	20	56	22	25	21	23	20	21	20	
J.	suortiN negortiN	•	•	:	Nil	Z. Z. Z.	Nii N	Nil	Nil	Nill	Niil	Nii	Nil	
v Water	Nitric negortiN	•	•	•	Nil	S Nil	7 Nil	H Nil	Nil	L Nii	l Nil	Nil	Nil	
d Raw	Absorbed	:	:	•	0.162	0.156	0.137	0.144	0.167	0.171	0.191	0.173	0.167	
Chlorinated	bionimudlA negortiN	•	:	:	0.038	0.030	0.027	0.029	0.037	0.021	0.031	0.051	0.043	
Ch1	IsosinommA negortiN	•	•	•	Nil	0.005	Trace	0.005	0.005	Nil	Nil	Trace	Trace	
	Smell	•	* *	•	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
. 4	No, of Samples		:	:	. 12	26	22	1 25	21	23	20	21	20	
conduit	suortiN negortiN	Z —	Z	Z	N. I.	Z		Z	— Zij	Z	Z. Z.	N. I.	Nil	
the	Nitric Nitrogen	liN	2 Nil	Niil	2 Nil	Lin 2	Nil	liN	IIN /	Nil	Nill	3 Nil	Nil	
end of	Absorbed negyzO	0.11	0.12	0.143	0.16	0.162	0.142	0.150	0.177	0.188	0.192	0.18	0.178	
Ķilpauk	bionimudIA negortiN	0.025	0.024	0.028	0.038	0.030	0.027	0.059	0.034	0.024	0 · 0 3 2	0.053	0.044	
water, Ķ	IsosinommA negortiN	0.003	Kii	0.003	Nil	0.005	Nil	Trace	Trace	Nii	Trace	Nil	Niil	
	Smell	Nii	Niil	Nil	Nil	Nil	N:11	Nil	Niil	Niil	Niil	Nil	Nil	
Raw	soldmas to .oV	6T :	20	: :	20	26	67	25	21	: 01 69	20	21	: 03	
1947	Month	January	February	March	April	May	June	July .	August	September	October .	November .	December	

VIII			+ 0.1 c.c	•	:	•	Nil	÷	:	Nil	:	:	Niil	•	:
No.	bium	J	+ 1.0 c.c	:	:	:	Nii	:	:	Nii	:	•	Nil	:	:
STATEMENT	system of Sembium	nters in	+ o	:	:	:	Niil	:	:	Niil	:	:	%09	:	:
STATE	system	e fermenters	+ 10 c.c	:	:	•	Nil	•	:	Niil	•	:	%08	:	:
	Distribution	Lactose	+ 20 c.c	:	•	•	10%	:	:	%0%	•	:	%01	:	:
systems	Distri		c.c	:	•	•	40%	:	•	40%	:	;	Nil	:	:
oution			09—	•	•	•	20%	•	:	30%	:	:	10%	:	•
stril		səldm		:	•	:	10	:	:	10	:	:	10	:	:
um dis			+ 0·1	:	:	Nil	:	:	Niil	:	Nil	:	:	Nii	:
Sembi	Saidapet		+ 1.0 c.c	:	:	Nii	•	÷	:	•	%2.91	:	į	Nil	•
et and		iters in	+ 5 c.c	:	:	Nil	•	:	Niil	•	33.3%	:	•	%01	<b>:</b>
Saidap	ystem	fermer	+ 10 c.c	:	:	Nil	:	:	20%	•	%09	•	•	20%	:
City,	Distribution system of	Lactose fermenters	+ 20 c.c	•		%07	•	•	22%	:	Nil	:	:	40%	:
results of the City, Saidapet and Sembium distribution	Distrib		- 60 c.c	:	:	%07	:	:	18%	:	Nil	•	:	Nii	•
results			09—	•	•	%09	:	:	40%	•	Nil	•	•	Nil.	•
3al		səldm	ss to .ov	<u>:</u>	:	10	:	:	10	:	10	:	:	10	
important bacteriological			+ 0·1 c.c	Nil	Nil	•	:	Nil	:	Nil	:	Nil	•	Nil	Nil
t bacte	ity		+ 1.0 c.c.	Nii	Nil	:	:	Nil	•	Nil	•	Nil	•	Nil	Nil
portan	of the	nters ir	+ 5 c.c	Nil	Nil	•	•	Nil	:	Nil	•	Nil	•	Nii	Nil
	Distribution system of the city	Lactose fermenters in	+ 10 c.c	Nil	12.5%	:	:	Nil	•	Nil	:	Nil	:	Nil	Nil
Showing	ution s	actose	+ 20 c.c	Nil	Nil	•	:	Nil	:	Niil	:	Nil	:	%01	10%
SISA	Distrik		+. 60 c.c	10%	72%	•	:	%01	•	40%	:	20%	•	10%	30%
ANALYSIS			09— c.c	%02	62.5%	•	•	%06	:	%09	•	%09	:	%08	%09
R.		mples	se to ov	10	10	:	:	10	:	10	:	10	:	10	10
WATER	1947		Months	January	February	March	April	May	June	July	August	September	October	November	December.

STATEMENT No. IX

Showing important chemical results of the City, Saidapet & Sembium distribution systems WATER ANALYSIS

(Results expressed in parts per 100,000)

	APPENDIX													1
	m	sətittiN	:	•	:	Nil	:	:	Nil	*	•	Nil	:	:
	Sembium	Zetrates .	•	:	:	Trace	•	•	Trace	:	•	Trace	•	:
	em of S	Absorbed	:	:	:	0.035	:	:	0.048	•	:	0.079	:	:
	on syst	Albumin- bio magartiN	:	•	•	Nil	:	:	0.004	•	:	900.0	:	:
	Distribution system of	Ammonia- leal Nitrogen	•	•	:	Nil	:	:	Nil	:	•	Trace	:	:
	Dis	Smell	:	:	:	Nil	:	:	Nil	· :	:	Nil	:	:
	səldı	Mo. of San	:	:	:	10	:	:	10	:	:	10	:	:
	et	sətirti <i>N</i>	•	÷	Nil	:	:	Nil	:	Trace	:	:	Trace	:
10006	of Saidapet	SetratiV	:	:	8 Present	•	:	0 Present	:	8 Present	:	:	2 Present	
rot to	system of	Absorbed negyzo	:	:	0.03	:	:	0.030	•	0.038	:	:	0.032	:
Low tool	ion sys	-nimudlA bio nagortiN	:	:	0.003	:	:	Nii	:	Trace	:	:	Trace	:
2000	Distribution	-sinommA lso IsontiV	:	a •	0.005	:	:	Trace	•	Trace	:	:	Trace	:
order o	D	Smell	:	:	Nil	:	:	Nil	:	Nil	:	:	Nil	:
410	səld	meS to .oV	:	:	10	:	:	10	:	10	:	:	10	:
7-600	Ϋ́	Ritrites	Niil	Nil	:	:	Nil	:	Trace	:	Nil	:	Nil	Nil
	the city	Ritrates	Trace	Trace	:	1:	Trace	:	Nil	:	Ni:	:	Trace	Trace
	system of	Absorbed Oxygen	690.0	0.078	:	:	0.105	:	860.0	:	0.130	:	0.092	0.130
		-nimudlA bio nagoraiN	0.014	0.026	:	:	0.019	:	0.021	:	0.019	•	0.026	0.022
	Distribution	Ammonia- las Nitrogen	Trace	0.005	:	:	0.005	:	Trace	:	Niil	:	Nil	Nil
	D	Smell	Nil	Nil	:	:	Niil	:	Nil.	:	Nil.	:	Nil	Nil
	bjes	ms2 to .oV	10	10	:	:	10	:	10	:	10	:	10	10
	1947	Months	January	February	March	April	May	June	July	August	September	October	November	December

WATER ANALYSIS

and Sembium
infiltration gallery wells at Saidapet and S
s of raw water from the i
acteriological result
Showing important b

STATEMENT No. X

n		+ 0.1 c.c	:	:		Nil	•	:	Nil	÷	:	Nii	•	:
Water from Infiltration Gallery Well in Sembium		+ 1.0 c.c	:	•		Nil	:	• .	Nil	:	:	Nil	:	:
ry Well in	nters in	+ 5 c.c.	:	•		%06	:	:	95%	:	:	%001	:	:
ion Galle	Lactose fermenters	+ 10 e.e.	:	•		%01	:	:	%9	:	:	Nil	:	:
Infiltrat	Lacto	+ 20 c.c. +	•	•		Nil	:	:	Nil	:	:	Nil	÷	:
ater fron		+ 60 c.c. +	:	•		Nil	•	•	Nil	:	:	Nil	•	:
Raw W		– 60 c. c.	:	:		Nil	•	•	Nil	:	:	Nil	•	:
	oles Səle	No. o Imas	•	•		က	:		က		:	က	:	:
LD.		+ 0.1 c.c	:	:	Nil	•	•	Nil	:	Nil	•	:	Nil	:
Saidape		+ 1.0 c.c	:	•	Nil	:	•	Nil	:	Nil	:	•	liN.	:
y Well in	nters in	+ 5 c. c.	•	:	Nil	•	:	Nil	:	Nil	•	:	Nil	į
on Galler	se fermenters	+ 10 c.c.	•	•	Nil	•	:	Nil	:	Nil	:	:	%07	•
Raw Water from Infiltration Gallery Well in Saidapet	Lactose	+ 20 c.c.	:	:	%06	•	:	100%	:	100%	:	•	%08	•
ater from		+ 60 c.c.	:	:	%01	:	÷	Nil	:	Nii	•	•	Niil	
Raw We		-60 c.c.	:	:	Nil	:	:	Nil	•	Nil	:	•	Nil	:
		oN qms2	:	•	က	:	:	ಣ	:	ଠା	•	:	ପ	
H_18		Month	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.

STATEMENT No. XI

WATER ANALYSIS

Showing important chemical results of raw water from the infiltration gallery wells in Saidapet and Sembium

(Results expressed in parts per 100,000)

1947		Infiltrat	ion galler	y well in 8	Saidapet	Infiltration gallery well in Saidapet (Raw water)	er)	In	filtration	n gallery	Infiltration gallery well in Sembium		(Raw water)	3r)
Month	No. of Samples	Smell	IsəsinommA nəgortiN	bionimudlA negortiN	Absorbed negyx0	Nitrate	StirtiV	səlqmsZ to .oN	Smell	IsosinommA negortiN	bionimudIA negortiN	Absorbed negyxO	Nitrate	Nitrite
January	:	•		:	:	:	•	•	:	:	:	:	:	:
February	•	•	*	:	•	-:	:	:	:	:	:	:	:	•
March	ော	Nil	0.005	800.0	0.039	Intense	Nil	:	*	:	:	:	•	:
April	:	:	:	:	•	:	•	က	Nil	N:1	0.004	0.027	Trace	Niil
May	:	:	•	:	:	:	:	:	:	:	:	:	:	:
June	က	Nil	Trace	0.005	0.028	Present	Nil	*	:	:	•	•	•	:
July	:	:	:	•	:	:	•	က	Nil	Nil	0.004	0.048	Trace	Nil
August	က	Nil	Trace	Nil	0.036	Present	Nil	:	•	:	:	:	•	•
September	:	:	•	•	:	•	:	:	:	:	:	:	•	:
October	•	:	:	:	•	•	:	က	Nil	Trace	0.003	0.065	Nil	Nil
November	67	Nil	Trace	Trace	0.030	Present	Nil	:	:	:	:	:	:	:
December	:	:	:	:	:	:	:	:	:	•	:	:	:	:

## APPENDIX

STATEMENT No. I

U	)
-	4
J.	2
VSTS'	ł
AL	1
V	1
Z	i
	1
-	į
-	1
	)
C	)
T	,

9	Percentage of samples	64.6	22.0	2.9	9.1	18.2	31.1	:	:	47.8	54.5	38.4
1946	Number of samples	1,227	164	464	285	33	347	62	21	23	22	2,665
10	Percentage of adulterated samples	2.99	20.0	13.7	6.4	6.5	21 2	2.1	•	64.3	2.99	36.3
1945	Soldmas to rodmuV bosylana	1,078	150	451	235	31	ଜ୍ବ	53	70	55	6	2,097
<del></del>	Percentage of samples	45.0	34.8	13.2	7.9	6.9	:	11.6	:	34.3	38.5	20.7
1944	Number of samples	456	158	658	495	87	14	69	21	29	13	2,038
33	Percentage of samples	46.8	31.2	24.3	2.1	:	:	19.3	:	36.1	63.2	22.1
1943	səlqmas to tədmuN bəsylana	380	189	703	437	116	42	83	30	61	19	2,060
2	Percentage of adulterated samples	27.1	21.9	28.3	4.8	16.3	4.7	39.9	:	44.4	:	20:7
1942	Number of samples	365	123	520	420	. 98	43	129	45	6	ಣ	1,755
	Percentage of ·	64.5	18.8	5.5	8.3	2.0	1.8	4.4	:	20.0	19 2	40.3
1947	Number of adulte- rated samples	1,186	42	24	31	<b>C</b> 1	C.I	70	:	က	70	1,300
	Number of samples	1,840	223	459	374	40	113	114	33	9	27	3,229
-	<b>∞</b>	:	•	•	•	:	:	•	<b>6</b>	:	:	tal
	Nature of Samples	Milk	Butter	Ghee	Gingelly Oil	Groundaut Oil	Cocoanut Oil	Coffee Powder	Tea	Ghee Substitutes	Other Articles	Total

STATEMENT No. II

949I ni	Average fine per conviction	46	56	69	51	43	54	20	•	:	20	47
(	9481 ni bəs <b>o</b> qmi sənA latoT	30,411	1,295	1,104	1,525	130	2,325	40	:	:	150	36,980
9761	Number of convictions in	663	23	16	30	ಣ	43	01	:	:	ಣ	783
ui n	Average fine per conviction	41	56	83	56	55	55	:	:	09	45	44
2	7491 ni bəsoqmi sənf lstoT	41,318	1,900	2,574	1,465	110	3,161		:	09	135	50,723
pə	Number pending disposal	369	12	4	1	:	61	4	:	:	<del></del>	399
dulterat with	Number taken under Sec. 14, but acquitted, with-drawn or not prosecuted	31	П	:	:	:	1	1	•	:	63	42
Total number of adulterated samples dealt with during 1947	Number seized under Sec. 9 and forfeited or destroy-ed under Section 12 without prosecution	:	:	1	:	:	•	:	:	23	:	က
tal nu sam	snoitoivnoo to redmuN	997	34	31	26	C)	58	:	:	1	က	596 1152
m To	Number of samples	1397	47	36	33	CI	67	·	:	က	9	1596
ıe sal	Iszoqsib gaibner pending disposal 7481-21-18 no	10	:	:	:	•	61	:	:	:	:	12
oles of the ing disposal	Number taken under Sec. 14, but acquitted, with drawn or not prosecuted	4	:	:	:	:	7	•	:	:	:	11
rated samples year pending on 1-1-1947	No. Seized under Sec. 9 and forfeited or destroyed under Section 12 without prosecution	:	:	:	:	•	:	:		: :	•	:
Adulterated previous year on 1-	Number of convictions	197	70	12	67	:	56	:	•	:	<del></del>	273
A pre	Number of samples	211	70	12	<u>C7</u>	:	65	:	:	:		296
೬೦	Number pending disposal	359	12	4	7	:	:	4	:	:	H	387
samples among les analysed 1947	Number taken under Sec. 14, but acquitted, with-drawn or not prosecuted	27	Н	:	•	•	•	<del> </del>	:	:	67	31
	Number seized under Sec. 9 and forfeited or destroy- ed under Sec. 12 without prosecution	:	:	Н	:	:	:	:	•	67	:	က
Adulterated the samp in	Number of convictions	800	29	19	24	<u>01</u>	63	:	:	<del></del>	67	879
Ac	Number of samples	1186	42	24	31	01	67	20	:	ಣ	70	1300
	Nature of samples		:	÷	Oil	ut Oil	Oil	wder	:	estitutes	ticles	Total
	Natur	Milk	Butter	Ghee	Gingelly Oil	Groundnut Oil	Cocoanut Oil	Coffee Powder	Tea	Ghee Substitutes	Other Articles	

### STATEMENT No. I

# Showing eases of labour which came under the observation of the Child Welfare Scheme in 1947

-			How	condu	ected	d d	Cas	ste	Rema	rks
No.	Centre	By Nurses of C.W.S.	Taken to Hospital	Barber women conducted	Maternity ward	Total	Muslim	Non-Muslim	Twins	Still birth
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	Royapuram Washermanpet Muthialpet George Town Trevelyan Basin Park Town Purasawakam Sembium North Perambur Pulianthope Choolai Periamet Chetpet Kilpauk Egmore Triplicane Mirsahibpet Mylapore Royapettah Mandavalli Saidapet Tondiarpet Kothwal Bazaar Adyar Choolai Maternity Home	646 1369 803 382 685 370 617 376 357 698 686 349 181 108 672 863 728 603 639 405 135 42 81 180	47 144 82 108 87 32 71 108 43 29 63 31 25 18 49 65 14 26 25 18 47 9	78 72 61 3 42 25 82 40 73 68 23 15 17 11 70 71 27 18 93 14 15 17 1 7	663 401 340 294 306 263 339 232 161 177 404 470 115 28	771 1585 946 1156 1215 427 1110 818 779 1058 1111 627 384 314 791 1403 769 647 757 437 667 183 89 219	348 338 116 6 78 110 358 23 61 121 603 338 70 109 12 32 4 31 5	669 700 1088 566 378 299 670 800 431 577 648 428 638 179 214	7       12         7       5         6       7         7       4         8       6         8       6         8       6         8       6         8       7         8       7         9       2         4       2	31 45 18 17 17 13 22 23 13 17 24 9 25 8
		12115		943	4193	18412				494

STATEMENT No. II

## Showing the number of visits paid by the staff of Child Welfare Scheme in 1947

S	Serial	Claud		T	Visits paid l	оу	(D-4-3
	No.	Centre		Midwives	Health Visitors	Lady Doctors	Total
-	1	Royapuram	• • •	7944	7800	1204	16948
	2	Washermanpet		15450	11242	1322	28014
	3	Muthialpet		10614	9606	947	21167
	4	George Town	• • •	13851	12098	1254	27203
	5	Trevelyan Basin		11404	10478	1112	22994
	6	Park Town	• • •	4655	8218	1020	13893
	7	Purasawalkam	• • •	15241	10044	1274	26559
	8	Sembium		<b>53</b> 73	7468	1255	14096
	9	North Perambur		5832	11719	1120	18671
	10	Pulianthope	• • •	10716	9775	1152	21643
	11	Choolai	• • •	11419	8781	1193	2139 <b>3</b>
	12	Periamet	• • •	6874	9318	1031	1 <b>7223</b>
	13	Chetpet		3657	6030	1083	10770
	14	Kilpauk	• • •	3450	4901	1198	9549
	15	Egmore	• • •	7571	8071	1203	168 <b>45</b>
	16	Triplicane	• • •	13092	11582	1097	25771
	17	Mirsahibpet	• • •	8642	10386	1145	20173
	18	Mylapore		7010	9923	1227	18160
	19	Royapettah	• • •	7926	6289	1234	15449
ž.	20	Mandavalli	• • •	5171	5482	1169	11822
	21	Saidapet		5441	4064	1066	10571
	22	Tondiarpet	• • •	1780	1359	444	<b>3</b> 58 <b>3</b>
	23	Kothwal Bazaar	• • •	855	1178	163	2196
	24	Adyar	• • •	5896	929	140	696 <b>5</b>
	25	Maternity Home, Choolai	• • •	• • •	190	169	359
	,			189864	186931	25222	402017

APPENDIX

### STATEMENT No. III

Showing the number of pre-natal cases registered and number of booked cases conducted

No.	Centre		Natal Cases	No. of booked cases which attended the Ante-Natal Clinic	Cases not confined
1	Royapuram	• • •	1304	1214	132
2	Washermanpet		2121	1971	165
3	Muthialpet		1714	1663	493
4	George Town	• • •	. 1796	1482	248
5	Trevelyan Basin		1872	1786	254
6	Park Town	• • •	637	614	74
7	Purasawalkam	• • •	1696	1633	173
8	Sembium	• • •	1050	917	116
9	North Perambur	• • •	1121	979	140
10	Pulianthope	• • •	1414	1255	103
11	Choolai	• • •	1302	1283	128
12	Periamet		909	801	108
13	Chetpet	• • •	583	550	135
14	Kilpauk		415	402	58
15	Egmore	• • •	1339	1177	175
16	Triplicane	• •	2216	1989	141
17	Mirsahibpet	••	1112	1112	53 -
18	Mylapore	• •	. 1007	1003	96
19	Royapettah	• •	1005	1001	95
20	Mandavalli	• •	573	572	29
21	Saidapet	• •	1080	998	139
22	Tondiarpet	• •	421	291	102
23	Kothwal Bazaar		292	185	105
24	Adyar	• •	. 369	335	53
25	Maternity Home, Choolai	• •	313	312	158
			27661	25524	3473

STATEMENT No. IV

CHILD WELFARE SCHEME

47
19
.E.
nt
ne
atı
re
7
ise
ďΨ
ය ග් න
nt
tie
g
nd
ිසි
sed
nos
) ල
Ġ.
ıcv
nan
<u> </u>
pr
of
1 <b>t</b> S
ner
ii
d a
an
es
Sas
ise
r T
an(
p
ere
s registe
re g
ase
J C
ata
e-n-e
pre
20
showing pre-natal cases registered and diseases and ailments of
ho,
S

Total	1214 1971 1663 1482 1786 614 1633 917 979 1255 1255 1282 801 550 402 1177 1989 1112 1003 1003 1003 185 335 335	25524
Other Diseases.	31 109 365 99 99 92 111 170 129 107 107 104 104 104 104 104 104 104 104 104 104	2830
Lencorrhoea Ear and Eye disease Rheumatism	2 2 2 144 19 19 19 19 19 19 19 19 19 19 19 19 19 1	7 47 23 44
Normal	20 820 820 820 820 820 820 820 8	6287
Morning Sickness Heart Burn	2 20 15 1 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	44 87 40 47 26
Giddiness Breast Abscess	10       14       14       14       10 <td< th=""><th>37 40</th></td<>	37 40
Jaundice		44
Debility	39 118 125 125 125 125 125 125 125 125	1149
Neuritis	85 4 : : : : : : : : : : : : : : : : : :	205
Skin Affection	11	44 209
kmsdtsA	1: : : : : : : : : : : : : : : : : : :	
Ulcerated Vulva	L:::::::::::::::::::::::::::::::::::::	16
Scanty Urine	108 1172 138 139 139 139 142 168 188 187 181 187 80 65 65 65	1830
Eclampsia	15 : : : : : : : : : : : : : : : : : : :	36
Dypepsia	441 148 169 178 183 183 183 184 185 185 185 185 185 185 185 185 185 185	1409
Malaria	118 178 189 189 180 180 180 180 180 180 180 180 180 180	66
.H .4 .A		- C
eznənlinl	10000000000000000000000000000000000000	538
General Anasarca	20 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	269
V. D. H. Gastritis	2010 44 52 10 10 22 .	41 80 269
Diarrhoea	11000000000000000000000000000000000000	344
Dysentery	18 18 18 18 18 18 18 18 18 18	
Stomatitis	100 100 100 100 100 100 100 100	1419 423
Bronchitia	82 20 40 41 107 107 83 83 84 83 84 83 85 85 85 85 85 85 85 85 85 85 85 85 85	785
&innimudlA	94 140 140 129 130 140 140 140 140 140 140 140 140 140 14	685
siməsnA	319 363 277 237 10 10 10 10 10 10 10 10 10 10	2005
noitaqitanoO	370 158 370 319 416 102 102 145 145 125 1125 106 69 69 69 69 83 85 85 85 85 85 85 85 85 85 85 85 85 85	4458
		1.
Centres.	Royapuram Washermanpet Muhialpet George Town Trevelyan Basin Park Town Purasawalkam Sembium North Perambur Pulianthope Choolai Periamet Chetpet Kilpauk Egmore Triplicane Mirsahibpet Mylapore Royapettah Mandavalli Saidapet Tondiarpet Kothwal Bazaar Adyar Maternity Home, Choolai.	
Serial No.	198420001128411111282222222222222222222222	

Showing maternal morbidity (Puerperal) in 1947

TetoT	283 283 250 250 116 292 172 547 547 569 300 80 256 409 365 87 442 1128 113	6140
Other Diseases	33. 15. 15. 15. 15. 15. 15. 15. 15	374
Venereal		 
Sepsise Retained membrane	c1 : : : : : : : : : : : : : : : : : : :	6
		13
Retention of Urine		108
Pneumonia Tuberculosis	1	34 26
Оедепля	<u> </u>	9113
Тегіпент Теяг	20 : 4 : 5 : 5 : 5 : 5 : 5 : 5 : 5 : 5 : 5	263
Debility	222 11	345
suing reflA	18 10 10 10 10 10 10 10 10 10 10	396
Нурег Ругехія	100	23
Stonastitis	15 10 10 10 10 10 10 10 10 10 10 10 10 10	425
Skin Disease	7 S : 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	179
A. P. H.	200 : 14 : 204 : 2002 : : : : : : : : : : : : : : : :	112
Breast Abscess P. P. H.	000       :00000000       :40       -1       :0         000       :1       :0 <td>38</td>	38
Constipation	60 14 12 10 10 10 10 10 10 10 10 10 10 10 10 10	785
Gastritis	4. :4. :4. :4. :4. :4. :4. :4. :4. :4. :	274
- Janualice	_ co : : : : : : : . : . : . : . : . : . :	28
вэодтивіС	01 04 : : : : : : : : : : : : : : : : : : :	219
Asthama	9       :8       :1010101024       :11	15 10 40 81 63 219
Eclampsia Ulcerated Vulva	14       : 8       : 4 & 8 & 8 & 9       : 1 & 9 & 9       : 1 & 1       : 1       <	408
Adherent Placenta	.н : н н н н н н н н н н н н н н н н н н	010
Retained Placenta	40047810177004702278710 : : : : : : : : : : : : : : : : : : :	1
Linduenza	101 8000110 044 F04::U	566
Dysentery	81 80 81 82 82 84 84 84 84 84 84 84 84 84 84	234
Bronchitis	2000 : 20	30 333
V. D. H.		II.
. RizelaM		131
BirnminndlA	7: 1	199
вітэвпА	111 100 100 100 100 100 100 100 100 100	751
		. 15
Centre	Royapuram Washermanpet Muthialpet George Town Trevelyan Basin Park Town Purasawalkam Sembium North Perambur Pulianthope Choolai Periamet Chetpet Kilpauk Egmore Triplicane Mirsahibpet Mylapore Royapettah Mandavalli Saidapet Tondiarpet Kothwal Bazaar Adyar Choolai.	
o Z	-28 4 6 9 5 6 6 6 7 8 6 6 7 8	

Deaths among cases under the treatment of Child Welfare Scheme and others

	Centre		under the	among cases care of Chil not under	Deaths among cases brought under care of Child Welfare	
No.	Centre		Under Private Doctor	Under Vidian's treatment	In Hospital	Scheme and under treatment of Child Welfare Scheme
1	Royapuram		• • •		1	•••
2	Washermanpet		1	•••	3	•• (
3	Muthialpet	• • •	•••	•••	1	1
4	George Town	• • •	1		1	•••
5	Trevelyan Basin		•••	• • •	3	•••
6	Park Town	• • •	•••	• • •	•••	•••
7	Purasawalkam	• • •		•••	2	•••
8	Sembium	•••	•••	•••	•••	1
9	North Perambur	• • •		• • •	•••	
10	Pulianthope	• • •	• • •	•••	5	•••
11	Choolai .	• • •	• • •	•••	1	•••
12	Periamet	• • •	• • •	1		` 1
13	Chetpet .		• • •	•••	1	1
14	Kilpauk .			•••	•••	
15	Egmore .		• • •	•••	2	•••
16	Triplicane .		•••	• • •	1	1
17	Mirsahibpet .		• • •	•••	1	
18	Mylapore .	• •	• • •	•••	1.	
19	Royapettah .		• • •	•••	•••	
20	Mandavalli .	•	•••	• • •	•••	•••
21	Saidapet	• • •	5 • • •		1	
$22^{^{\dagger}}$	Tondiarpet .	••	•••	•••	1	
23	Kothwal Bazaar.	•••	• • •	•••	1	•••
24	Adyar .	••	• • •	• • •	1	•••
25	Maternity Home, Choolai.				1	
	Ontolial.		9			
			2	1	28	5

Total (2+1+28+5)=36.

Showing the causes of death among cases brought to the notice of Child Welfare Scheme (vide Statement No. VI-A)

,	Child Welfar	e 5c	neme	e (v)	lae	5 ta	, tei	mer	16 110	). Y .	L-A)			
No.	Centre		Toxaemia of	Shock due to	Anaemia.	P. P. H.	A. P. H.	0/2	Forceps contracted	Post operation	Shock. Retained Placenta.	Adherent Placenta.	Sepsis. Advanced	Anaemia. Total.
1	Royapuram	• •	•	• •	.   ]		·  •••		•				• • • • •	.   1
2	Washermanpet	••	. 1	]				• • •	1					. 4
3	Muthialpet	• •				1		1.		• •	•	••••		. 2
4	George Town	• • 1		•	. 1				• • • • • • • • • • • • • • • • • • • •				1	. 2
5	Trevelyan Basin	• • •						2	1			• • • •		. 3
6	Park Town	•••	•••	• • •					•••	•••	ļ;			• •••
7	Purusawalkam	• • •	•••	• • •				•••	1	1				. 2
8	Sembium	• • •	•••	•••	•••	•••		1.		•••				. 1
9	North Perambur	•••	• • •	• • •	•••	•••		••		•••			••	
10	Pulianthope	•••	• • •			• • •	1.		•••	1	1.	• •	2	. 5
11	Choolai	• • •	• • •	•••		•••	• • •	•	1	•••				1
12	Periamet	• • •	•••	•••		•••				•••	•••	••	. 2	2
13	Chetpet	• • •	•••	•••		•••		1	1	•••		••		2
14	Kilpauk	• • •	• • •	• • •		•••	•	•••••		. •••				• • •
15	Egmore	• • •	• • •	• • •		• • •	• •	1		•••		•	1	2
16	Triplicane	• • •	•••	•••			•		L	1			•••	2
17	Mirsahibpet	• • •	•••	•••			•			• • •		1		1
18	Mylapore	• • •	• • •	•••		••	•			- • •		1	• • •	1
19	Roypettah	• • •	• • •	• • •			٠.	•		• • •			•••	• • •
20	Mandavalli	• • •	• • •	•••				• • • • •		0 0 0			•••	
21	Saidapet	• • •	• • •	•••						• • •		1	• • •	1
22	Tondiarpet	• • •	•••	•••		1			• • •	•••			• • •	1
23	Kothwal Bazaar	• • •		•••				1	• • •	• • •		• • • •	• • •	1
24	Adyar	•••		•••			1		• • •	•••			• • •	1
25	Maternity Home Choo	lai	•••	•••				,		•••		. 1	• • •	1
			1	1	3	2	2	7 5	1	3		$\begin{vmatrix} 5 \end{vmatrix}$	2	36

History of

infants born in the year 1946 and kept under observation for a period of one year after birth

	hildren le	iədmuN O gnivil dsəəsit o nədw	646 1477 1167 1002	1245 392 1093	260 895	1047 1238 475	358 281 699	1358 764 576 575	323 206 190	116	16383
4	vise no	Left or other	83 40 40 58	58	84	25 91	27 4 33	43 18 2 73:	20.00	Ni .	784
	sd: gnib	oT Dead Suloxe Sulli-B	71 120 76 76	135 45 82	10 93	82 82 68	41 22 67	131 48 31 69	135	9	1459
	months	Not Traceable		7 5	49	12 69 69	6 15	10		: :	297
	10 to 12	Deaths	15 16 6	11 7 12	13.1	22 <b>L</b> 44	6 1 23	8 <b>2</b> - 0	o 0 10 co	; ;	221
	months	Yot Traceable	16 35 35 35	9	. 12	12	11 3	15	100	::::	162
	7 to 9	Deaths	118811	25 6	1753	44 E L C L		16 44 6 75	9 6 :	::::::	239
	months	Not eldesole	: 54 50 60		6 :	141	5		: :	:::::	111
Died within	4 to 6 r	Deaths	17 25 16	37 12 13	141	15	10	8 2 3 4 4	ळलल		281
Diec	months	toV eldseosiT	M 41 7 M	10	က r	; ;		67	n ආ	::::	49
	2 to 3	Deaths	8 15 15	44 4 w	: 0 r	122	F 10 10	27 6 72	: :	: : :	173
	days to 1 month	Yot oldsoort	0000	: 41 co	ට °	0014	: : ·	: 30 4 4	: :	:::::	59
	8 days mont	Deaths	26	01000	1 63 21	ى ت ت	4 3	क्षे कि क की	01-	:::::::::::::::::::::::::::::::::::::::	128
	7 days	Not Traceable	2 9	15	100	- 4 ~	: : I	13	 :	: : :	106
	1 to	Deaths	12 46 5 26	36 30 30	6 4 0	23 18 18	9 4 61	40 21 5 22	1 1 0	:::::::::::::::::::::::::::::::::::::::	417
	1138 to	redmuN i satrid	22 44 23 23	39 6 21	38 8	26	9	29 29 19 19	13	: :	521
ui	orn i	lstoT stantant 1946	743 1721 1331 1159	1254 1254	362 1042 1268	1371 652	316 816	859 859 859 830	376 253 207	125	.19147
	Centre		Royapuram Washermanpet Mutkialpet George Town	Park Town Purasawalkam	Sembium North Perambur Pulianthope	Choolai Periamet	Chetpat Kilpaek Egmore Triplicane	Mirsahibpet Mylapore Royapettah	Mandavalli Saidapet Tondiarpet Kothwal Bazaar	Adyar Maternity Home, Choolai	
		.oV	— cd co 4 r	92-	သတ္	112	14 15 15	173	0 0 0 0 0 0 1 0 0 0	42 42 6	

APPENDIX

Showing the causes of death among infants born in 1946 and kept under observation during 1st year of life

STATEMENT No. VIII

No. of living child- ren when one year blo	646 1477 1167 1002 1002 1245 392 1093 260 895 1047 1047 1238 475 358 281 699 1358 764 576 576 190 	16383
Left the city or otherwise not tra-	488 404 805 805 606 607 608 608 608 608 608 608 608 608	784
Total deaths exclud- ing still births	120 120 120 135 135 131 131 131 131 131 131 131 131	1459
Causes Unknown	[ ] a : : : : : : : : : : : : : : : : : :	29
Scorpion Sting	::::::::::::::::::::::::::::::::::::::	T and the state of
Swelling	:::::::::::::::::::::::::::::::::::::::	က
sisylereq elitaefal	:-::::::::::::::::::::::::::::::::::::	
Scurvy	: - : : : : : : : : : : : : : : : : : :	_
asizasM	: :4 :w : : : : : : : : : : : : : : : :	10
Abscess	::::::::::::::::::::::::::::::::::::::	13
90ibnus L	্ল : : : : : : : : : : : : : : : : : : :	7
Drugged with native	: : : : : : : : : : : : : : : : : : :	7
Bronchitis	::: 12 % : 6 :: 12 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :	39
noitesgibnl	:-:::::::::::::::::::::::::::::::::::::	2
Whooping Cough	:40144 : : : : : : : : : : : : : : : : : :	18
Pneumonia	:0124 :1 : :1 : :4000 :11 : : : : :	84
<b>R</b> ickets	: m m - m : : : : m : : : : : : : : : :	15
Constipation	:	29
Debility	: 12 4 2 7 2 : 10 : 10 2 10 : : : : : : : : : : : : : : : : : :	55
Dysentery	:40mvaa:uva:u-a4:dv:u::u::	99
Convulsions	: " : " : " : " : " : " : " : " : " : "	24
Сріскеп рох		13
Skin affection	0 - : : : : : : : : : : : : : : : : : :	33
Теуег		334
вэонтвід	88 :211 - 6 : 82 : 1 : 0 : 0 : 0 : 0 : 0 : 0 : 0 : 0 : 0	226
Died within ten days	21	422
Still Born	224488 8233 8333 8453 8453 8453 8453 8453 8453 84	521 4
nvod reamna beto T 3481 nl	743 1721 1331 1159 1476 443 1254 362 1042 1042 1042 1042 1371 659 630 736 859 630 736 376 376 1574	19147
Centre	Royapuram Washermanpet. Muthialpet George Town Treveleyen Basin Park Town Sembiam Sembiam North Perambur Pulianthope Choolai Periamet Chetpat Kilpauk Egmore Kilpauk Kilpauk Koyapetah Mylapore Triplicane Koyapetah Mylapore Koyapetah Mylapore Kothwal Bazaar. Adyar Kothwal Bazaar. Adyar	
No.	198470 8 7 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,

**H**—21

## STATEMENT No. 1X

Showing the total number of priority milk consumers from 1st January to 31st December 1947

No.	Centre		No. of Expectant Mothers	No. of Nursing mothers	No. of Infants	No. of Toddlers	Total
1	Royapuram	• • •	286	• • •	1,959	•••	2,245
2	Washermanpet	• • • •	923	1,247	1,881	2,816	6,867
3	Muthialpet	• • •	143	•••	2,411	•••	2,554
4	George Town	• • •	554	1,459	2,484	7,487	11,984
5	Trevelyan Basin	• • •	130		2,492	•••	2,622
6	Park Town	• • •	175		2,377	•••	2,552
7	Purasawalkam	• • •	126	2,701	2,537	• • •	5,364
8	Sembium	• • •	121		2,784	• • •	2,905
9	North Perambur	• • •	590	•••	2,042	••	2,632
10	Pulianthope		<b>3</b> 93	2,750	2,573	3,855	9,571
11	Choolai	• • •	495	•••	2,156	• • •	2,651
12	Periamet	• • •	308	•••	2,289	35	2,632
13	Chetpet	• • •	1,570	281	2,988	4,035	8,874
14	Kilpauk	• • •	373	167	4,967	1,752	7,259
15	Egmore	• • •	744	1,051	<b>7</b> 36	2,559	5,090
16	Triplicane	• • •	616	• • •	2,024	• • •	2,640
17	Mirsahibpet	• • •	144	•••	2,496	•••	2,640
18	Mylapore		106	•••	2,088	•••	2,194
19	Royapettah		140	•••	2,508		2,648
20	Mandavalli	• • •	135	•••	1,933	•••	2,068
21	Saidapet	• • •	138	• • •	2,482	•••	2,620
22	Tendiarpet	•••	<b>3</b> 91	533	2,496	3,676	7,096
23	Kothwal Bazaar	• • •	18	• • •	2,100	•••	2,118
24	Adayar	• • •	* * a	•••	1,454	•••	1,454
25	Maternity Home Choolai						
	CHOOM		8,619	10,189	56,257	26,215	1,01,280

CHILD WELFARE SCHEME

ζ
2
4
2110
<u> </u>
+110
٥
1+ 1
<u> </u>
191
ild
c h
nd
20
her
104
~
<u>-</u> -
sing r
ursing r
d nursing r
and nursing r
ent and nursing r
setant and nursing r
xpectant and nursing r
f expectant and nursing r
e of expectant and nursing r
unce of expectant and nursing r
ndance of expectant and nursing r
ttendance of expectant and nursing r
l attendance of expectant and nursing r
otal attendance of expectant and nursing r
d atte
d atte
d atte

STATEMENT No. X

1	7	6	١
2	ĸ	т.	p
ĸ.	3	_	_

FORM 'A'

T -	
1	
0	
194	
_	
1	
- L	
N	
-	
' .'	
- 1	
,	
9	
010	
3 31.	
-1947to	
T	
-	
1	
্বা	
<b>U</b> 2	
~	
- 1	
_	
1	
+	
+	
1-1-	
1-1-	
From 1-1-	
-From 1-1-	
-From 1-1-	
-From 1-1-	

CHILD WELFARE SCHEME

Maternal	Morbidity	Morbidity	341 283 283 250 116 292 300 300 80 442 87 442 128 128 113	6140
, , <u>, , , , , , , , , , , , , , , , , </u>		Maternal Mortality		36
		SairsuM SairsuM	7990 10363 10363 10528 10528 10477 7444 7444 10908 6555 6555 6628 10444 16421 16421 16432 1632 1632 1633 1633	151497
		Number held	357 157 157 357 156 156 155 157 157 157 157 157 167 167 168 65	4201
	e	Pre-school	2397 2397 2517 4123 1837 1573 2285 1573 1573 1573 1573 1573 1573 1573 1789	.45064
i c s	danc	Number held	357 156 156 156 156 156 156 157 157 167 167 167 168 168 168 169 169 169 169 169 169 169 169 169 169	4044
Clin	t t e n	stastal	\$2280 \$3302 \$3302 \$4528 \$4528 \$4528 \$4528 \$4528 \$4528 \$4528 \$453 \$453 \$453 \$453 \$453 \$453 \$453 \$453	126729
	A	Number held	357 156 156 156 156 156 157 157 157 167 168 168 168	4044
		lsten-itnA	5314 65229 10459 9566 6151 8472 1925 8035 1153 1153 1360	106035
		Mumber held	156 156 156 156 156 156 156 156 156 156	3398
	ives	P.N.	7257 14009 8937 1309~ 9813 3957 13769 4775 6324 6324 6324 6540 6540 6540 6540 6540 7910 6540 6540 6540 6540 6540 6540 6540 654	165932
Vis ts	Midwive	A.N.	687 1677 1677 1677 1677 1753 1753 1735 1735 1736 1736 1737 1739 1739 1739 1739 1739 1739 1739	23932
Home	Health Visitors	P.N.	6556 8233 10302 10302 8606 7520 7516 8174 8174 8560 8516 8516 7040 7040 7040 7040 8560 8560 730 730 730 740 740 850 850 850 850 850 850 850 850 850 85	138718
	Health Visitor	A.N.	1244 3003 3368 1796 1872 2528 2528 3555 1981 1181 1932 1401 1534 1534 1534 1534 1534 1534 1534	48213
	ls	oibeM nemoW ersomO	1204 1322 1254 1112 1020 1255 1125 1120 1169 1169 1169 1169 1169 1169 1169 116	25222
		Pre-school	646 1477 1167 1002 1215 1003 1003 10047 10047 10047 1358 1358 1358 1358 1358 1358 1358 1358	16383
r care		stastaI	743 1540 1136 1136 1179 1093 1093 1093 1093 1093 1093 1380 756 630 756 630 175 175 175 175 175 175 175 175 175 175	17918
Brought under		Labour	771 1585 946 1156 1215 427 1110 818 779 1058 1111 627 334 314 791 1403 769 647 757 183 183 149	18412
Brough		Івтви-этпА	1214 1971 1663 1482 1786 614 614 1933 1935 1939 11112 1001 1001 1855 1855 11112 1112 1113 1113 1113 1113 1113 1	25524
		Maternity Cas Total Number of Mothers	1304 2151 1714 1716 1872 637 1050 1050 1839 2216 1112 1005 1005 1005 1005 1005 1005 1005	27661
		. Centre	Royapuram Washermanpet Muthialpet George Town Treveleyan Basin Park Town Purasawalkam Sembium North Perambur Fulianthope Choolai Feriamet Chetpet Kilpauk Egmore Triplicanc Mirsahıbpet Mylapore Royapettah Mylapore Royapettah Mandavalli Saidapet Tondiarpet Kothwal Bazaar Adyar Maternity Home, Choolai	
		No.	120406000111111110120131313131	



